

**NORTH CAROLINA**

**OUTDOOR RECREATION PLAN**

**2015 - 2020**



May 2015

**Division of Parks and Recreation**

**N.C. Department of Environment and Natural Resources**



# INTRODUCTION

North Carolina has been blessed with a rich and varied tapestry of lands and waters. The landscape stretches from the Tidewater's ocean beaches, sounds and marshes westward through flat Coastal Plain swamp forests to the rolling Piedmont and on to ancient and hauntingly beautiful mountains, well-known and loved not just by North Carolinians, but by millions of Americans nationwide. Traversing and connecting this landscape are beautiful rivers and streams. These lands and waters provide not only breathtaking scenery and magnificent settings for outdoor recreation, but also serve to support a rich diversity of plant and animal life. North Carolina is indeed "Naturally Wonderful".

## EXECUTIVE SUMMARY

Since passage of the federal Land and Water Conservation Fund (LWCF) Act of 1965, preparation of a Statewide Comprehensive Outdoor Recreation Plan (SCORP) has been required in order for states to be eligible for LWCF acquisition and development assistance. Past SCORPs and this edition have provided a coordinated framework addressing the problems, needs, and opportunities related to the need for improved public outdoor recreation. The N.C. Division of Parks and Recreation, the state agency with authority to represent and act for the state for purposes of the LWCF Act, prepared this plan. LWCF funds have provided \$4.2 million for projects in North Carolina during the past five years, an average of \$850,000 annually. Since 1965, more than \$80 million of LWCF assistance has been provided for more than 900 projects.

The plan contents and format are shaped by the planning guidelines of the LWCF Act. The major requirements are comprehensiveness; an evaluation of the demand for and supply of outdoor recreation resources and facilities in the state; a wetlands priority component; a program for implementation of the plan; ample public participation in the planning process; and a description of process and methodology. The plan has been prepared to both meet requirements for continuing LWCF eligibility and meet the need for meaningful evaluation of state and local government public outdoor recreation projects.

Chapter 1 presents the setting for outdoor recreation in the state. Chapter 2 contains an estimate of the demand for outdoor recreation using data about recreation participation in North Carolina based on survey responses from over 17,000 state residents. In 2014, the Division of Parks and Recreation conducted an on-line survey and analyzed the responses received. The questionnaire asked North Carolinians about their preferences for outdoor recreation activities as well as their priorities for parks and recreation in the future.

Chapter 3 reports the results of an inventory of public outdoor recreation areas and facilities in North Carolina and makes comparisons county by county and statewide. Information was provided by local recreation agencies, state and federal agencies and geographic information databases. LWCF assistance will be awarded to counties showing higher relative needs using the state's Open Project Selection Process. Chapter 4 describes the roles and responsibilities of federal, state, local, private, and commercial outdoor recreation providers in the state. Chapter 5 presents information about the trails and greenways in the state which support some of the most popular recreational activities – walking

and hiking.

Chapter 6 presents the issues, goals and objectives identified for the next five years. The issues were developed following a review of the results of the citizen survey, a survey of recreation providers across the state and a review of the factors influencing the availability of outdoor recreation resources in North Carolina. In addition, these goals and objectives mirror many of the national goals established in the America's Great Outdoors, a 2011 initiative to develop a 21st Century conservation and recreation agenda. Chapter 6 also describes actions the state will be undertaking over the next five years to address the issues and needs identified in this plan.

While the level of LWCF apportionments recently available to North Carolina has lessened the LWCF program's impact, LWCF funds still serve to address issues of statewide importance and to help improve outdoor recreation in North Carolina.

Public involvement in the form of a public survey and meetings with stakeholders went into development of this plan. A final draft plan was also made available via the internet for public review and comment.

## **Key findings**

**Goal Statement:** To meet the outdoor recreation needs of a growing population, to manage and protect North Carolina's natural resources for current and future citizens, and to achieve the related health and economic benefits for local communities and the state.

Outdoor recreation is important to the lives and livelihoods of nearly all North Carolinians in one way or another. Nearly every respondent to the survey conducted as a part of the North Carolina Outdoor Recreation Plan are participating in an outdoor activity. The most popular activities in North Carolina are visiting a beach or lake, walking for pleasure, visiting parks and historic sites, hiking on trails, freshwater fishing, viewing scenery, fishing from a boat, nature viewing, swimming. In addition, at least ten percent of residents participate in activities such as canoeing, picnicking, bird watching, bicycling, and tennis.

The 2012 Outdoor Industry Association Report notes that in North Carolina outdoor recreation generates \$19.2 billion in consumer spending annually, \$1.3 billion in state and local tax revenue, 192,000 North Carolina jobs, and \$5.6 billion in wages and salaries.

## **Supply of Park Acreage and Recreation Facilities**

An inventory of federal, state and local park lands in North Carolina identified more than 3.5 million acres of land and water available for outdoor recreation. Local governments provide over 100,000 acres for close-to-home recreation such as walking, bicycling, team sports, picnicking and swimming. State parks, gamelands and historic sites offer more than 750,000 acres for activities that fit their missions such as hiking, camping, hunting and visiting significant natural and historic areas. Federal parks, forests, and refuges account for nearly 2.7 million acres and encompass the most popular national parks in the United States, the Great Smoky Mountains and Blue Ridge Parkway.



State parks have added more than 50,000 acres of park land in the past ten years as well as numerous visitor centers, trails and other improvements to better serve the public. Counties and municipalities continue to add more opportunities for their residents. In 2014, six cities had successful park and recreation bonds worth more than \$150 million. All were approved by more than sixty percent of the voters.

## **Demand**

The state's population has been rapidly growing in the past 25 years, among the fastest in the country. By 2015, North Carolina is projected to have more than 10 million residents, a fifty percent increase from 1990. More park land and opportunities are needed to keep pace.

Future park areas that are identified as most needed by recreation professionals are linear parks, nature parks, trail linkages to other jurisdictions, cultural / historic parks, and community parks. Unpaved trails, picnic shelters, wildlife / nature observation sites, and paved trails are among the top priorities for recreational facilities.

## **Issues and Objectives**

Based on a review of the public survey, input from recreation providers and a review of current trends the following priority issues and objectives that are affecting outdoor recreation were identified.

Issue	Objective
Growing Population	Meet the needs of North Carolina's rapidly growing population by maintaining and enhancing its outdoor recreation resources
Public Health	Support improvements in public health and fitness by increasing opportunities for physical activity
Access and Cooperation	Improve the visibility of and public access to public recreation areas and foster cooperation between public recreation managers
Outdoor Recreation and the Economy	Promote the economic advantages of the state's recreation opportunities for communities across North Carolina
Conservation	Protect and conserve North Carolina's high quality natural resources and landscapes
Public Awareness	Increase public awareness of the state's natural resources and outdoor recreation opportunities through education and outreach

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# Chapter 1

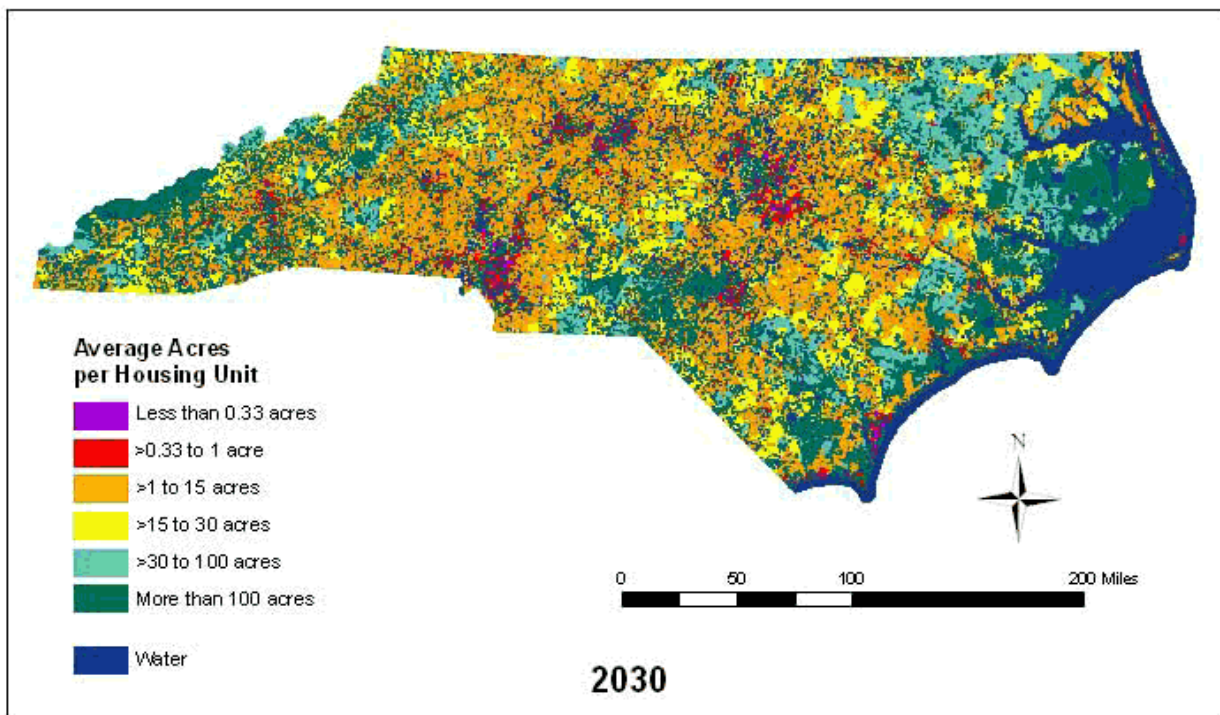
## North Carolina's Outdoor Recreation Setting

This chapter will provide a glimpse of several important factors that inherently affect the outdoor recreation setting in North Carolina.

### POPULATION AND GROWTH

North Carolina has been, and continues to be, one of the fastest growing states in terms of population in the United States. Between 1990 and 2010, some 2.9 million new residents came to call North Carolina home, which constituted a 44% growth spurt in that twenty year span, bringing North Carolina's population to 9.5 million. According to the U.S. Census Bureau, North Carolina's population grew at an annual rate of 1.7% between 2000 and 2010, far exceeding the nation's average growth rate of 1%. The Census Bureau also reported that one third of the state's growth between 2000 and 2010 occurred in just two counties – Mecklenburg and Wake – while 75% occurred in the 20 largest counties (includes Wake and Mecklenburg).

## Projected Housing Density



Furthermore, migration accounted for 80% of North Carolina's growth during this time and the U.S. Census Bureau estimates that between 2010 and 2015, the number of people born outside of North Carolina could surpass the number of native North Carolinians living in the state.

Although only the 28<sup>th</sup> largest state in terms of size, it is the 14<sup>th</sup> fastest growing state since 2010. In addition, North Carolina is currently the 10<sup>th</sup> most populace state and is projected to move into the 7<sup>th</sup> spot by the year 2030.

The North Carolina population is aging as “Baby Boomers” retire, birth rates have slowed and average life expectancy increases. The median age in the state rose from 26.5 in 1970 to 36.2 in 2000. In 2010, the median age was 38.5 years old. The average life expectancy for a person born in 2010 is nearly 79 years old, an increase of about three years in the past two decades.



The 2010 Census in North Carolina reported a 25% rise in the Hispanic/Latino population since 1990. This segment of the population makes up for 8.4% of the state’s total population and it is the 11<sup>th</sup> largest Hispanic/Latino population in the United States. Furthermore, North Carolina has the 6<sup>th</sup> fastest growing Hispanic/Latino population in the country.

In 2012, the median household income in North Carolina was \$45,150, down 3.4% from 2009; compared to the national numbers of \$51,171, down 4.4% from 2009. Unemployment in North Carolina peaked in 2009 at 11.26%; fell to 9.6% in 2012 and fell even further to 6.5% in July 2014, compared to 6.2% national average.

Although unemployment is lower today than 5 years ago, median income is also lower. These factors, along with the rapid population growth and increasing diversity, create many challenges, socially and economically. Moreover, these ever-changing circumstances affect the planning and coordination of North Carolina's outdoor recreation programming and overall conservation of the state's natural resources.

With this expansive growth, comes the need for increased development, which reduces the availability of land for recreation. Herein lays the importance of ensuring that open space and land suitable for recreation purposes is sought and acquired at a pace equal to growth and other development. Funding and planning for such, will be a major challenge for North Carolina, but it is a challenge that be must met head-on to ensure the continued high quality of life environment that North Carolinians have come to love and expect. Growth, in general, contributes to economic vitality and represents a net positive for long-term employment prospects, but growth should not cloud the vision for the need to bolster public lands for recreational and conservation purposes.

Tourism is one of North Carolina's largest industries. In 2013, domestic travelers spent \$20.2 billion across the state, a 4.4% increase from the previous year, and a record high visitor spending figure. Of that \$20.2 billion total, \$1.9 billion was spent on recreation-related travel services. Tourism dollars directly supported 197,690 jobs for North Carolina residents, up 2% from 2012 and also a record high.





The industry contributed \$4.6 billion to the state's payroll in 2013 and traveler spending generated over \$3 billion in tax receipts (federal, state and local combined).

North Carolina ranks sixth in person-trip volume by state behind only California, Florida, Texas, New York, and Pennsylvania. North Carolina's many and wondrous natural resources, vacation spots, outdoor recreation areas, and recreation opportunities have become preferred destinations for both domestic and international travelers, which has had a significant economic impact on state and local economies, offering yet further motivation to increase and protect these precious resources.

## **GEOGRAPHY**

The geography of North Carolina falls naturally into three regions – the Appalachian Mountains (formed mostly by the Blue Ridge and Great Smoky Mountains), the Middle or Piedmont Plateau, and the Eastern or Tidewater section, also known as the Coastal Plain. North Carolina covers 53,821 square miles and is 503 miles long by 150 miles wide. In terms of size, it is the 28<sup>th</sup> largest state in the U.S.

*Appalachian Mountains:* North Carolina's mountain ranges are defined by distinct characteristics. The Smoky Mountain chain is more continuous, more elevated, more consistent in its direction and height, and rises very uniformly from 5,000 to 6,621 feet. The Blue Ridge is composed of many fragments scarcely connected into a continuous and regular chain. Its higher summits range from 5,000 to 6,700 feet; its average elevation is from 3,000 to 4,000 feet.





The mountain region includes many of the tallest peaks east of the Rocky Mountains. The tallest of the Appalachian Mountains is Mount Mitchell, which is the tallest point east of the Mississippi River. The mountain region is approximately 180 miles in length and twenty to fifty miles wide. The mountains lie within the Appalachian-Blue Ridge forests eco-region and are heavily forested. They often feature thick underbrush, except a few areas which are devoid of trees and are called balds.

**Piedmont:** The central region of North Carolina is referred to as the Piedmont plateau. The piedmont is a hilly region and includes the state's largest cities. Elevations in the Piedmont vary from 300 to 1,100 feet above sea level. There are a few isolated mountain ranges sprinkled here, mostly on the western side, but few of them reach over 1,200 feet. The Piedmont lies within the Southeastern mixed forests eco-region. The Fall Line separates the Piedmont from the Coastal Plain section of North Carolina



**Figure 1.1. Geographic Regions of North Carolina**

**Coastal Plain:** The Coastal Plain, covering roughly 45% of the state, is the largest geographic region of North Carolina. The Coastal Plain begins along the fall line, a line of hills which stretch from the South Carolina border through Fayetteville, then Raleigh, and finally through Henderson, near the Virginia border. The fall line marks where the Piedmont plateau drops down to the Coastal Plain; it also marks where waterfalls begin to appear on streams and rivers in the state. The hills of the fall line drop 150 to 350 feet in an eastward direction, but it is not particularly noticeable, as the drop is rather gradual occurring over a width of 1 – 3 miles. East of the fall line, the Coastal Plain is relatively flat, with sandy soils ideal for growing tobacco, cotton, soybeans, and melons.

The Coastal Plain section embodies the two largest landlocked sounds in the United States; the Albemarle Sound in the north and the Pamlico Sound in the south. The Pamlico Sound is larger than the state of Connecticut. The easternmost part of the Coastal Plain is home to the Outer Banks, known as the “Graveyard of the Atlantic” due to the vast number of ships that have wrecked along its beaches and shoals due to robust storms and strong tides. There are over 300 miles of shoreline and beautiful beaches along the Atlantic Ocean, stretching north from the Outer Banks, to Sunset Beach, the extreme southernmost point along the North Carolina coast.

### **Hydrology**

North Carolina is a place with rich water resources- from tumbling mountain streams to massive reservoirs in the Piedmont to its sprawling coastal waters. Water sustains the state’s quality of life by interconnecting social, economic, and environmental systems. More than 9 million North Carolina residents depend on water for drinking, irrigation, manufacturing and industrial processes, mining, recreation, and hydropower. Diverse wildlife find food, shelter and breeding grounds in the state’s plentiful rivers and wetlands. The state has 3,375 miles of tidal shoreline, more than 300 miles of coastline, vast reservoirs, 17 major river basins and a huge network of groundwater.



Water conservation is sometimes overlooked because of North Carolina's rather ample sources of water. However, times of drought are a reminder of the importance of protecting water quality and quantity.

North Carolina receives an average of 48 inches of rain per year, falling primarily as rain. The Coastal Plain gets about 48 – 60 inches annually; the Piedmont usually sees 40 – 50 inches; and the Mountain regions can receive anywhere from 38 – 90 inches depending on the slopes. Annual winter precipitation ranges from 1 inch at the Outer Banks to 50 inches of snow on some of the higher mountain peaks and upper slopes.

Tropical storms influence North Carolina's weather and water resources an average of twice a year. While they can be quite damaging with high winds and tremendous surges of water, they also can be beneficial. Tropical systems can account for as much as 25% of annual rainfall totals and often can be a source for quenching a prolonged drought. Furthermore, precipitation from tropical storms is a valuable resource for refilling reservoirs and recharging groundwater levels.

Groundwater levels rise and fall during and after rain. Levels are higher in late winter and early spring due to slower rates of evapotranspiration and lower in summer due to higher evapotranspiration. While groundwater is a renewable resource, it is possible to remove it faster than it can be replenished, especially with an ever-increasing population and growth of business, industry, agriculture and development in general. Depletion of groundwater is becoming more and more of a problem in some parts of Eastern North Carolina. Therefore conservation is becoming increasingly important and must be aggressively addressed.





In North Carolina, all municipalities and large private utilities are required to have a Water Shortage Response Plan in place. Among other things, the plan establishes different stages of water shortage severity and it must outline appropriate responses for each stage so that essential needs are met, including drinking water supply, water quality, aquatic habitat, and power generation.

In addition, the North Carolina Division of Water Resources has implemented a river basin water supply planning strategy to ensure that the state has sustainable water resources to meet future needs. Historically, natural wetlands dominated floodplains and river deltas, and most level land in the coastal plain. When colonization began, North Carolina had about 7.2 million acres of wetlands. Since that time, wetlands have been drained for agriculture, forestry, flood control, road construction and urban development. Now about half of the remaining acreage that was once wetlands still exists. According to the most recent figures available, about 5.1 million acres of North Carolina, close to 17 percent of the state, is still wetland. The Coast Plain contains 95 percent of the state's wetlands.



As North Carolina continues to be one of the fastest growing states in the nation, meeting growing water supply needs will require local and state governments, along with consumers working together to coordinate successful monitoring, planning and regulation. Smart decisions today will help ensure plentiful water for tomorrow.

### **Vegetation and Wildlife**

North Carolina has approximately 300 species of trees and almost 3,000 varieties of flowering plants. Along the coast and Coastal Plain region, plant life begins with Sea Oats predominating on the dunes and Salt Meadow and Cordgrass in the marshes. Further inland Wax Myrtle,

Yaupon, Red Cedar, and Live Oak are common and plentiful trees. Blackwater swamps support dense stands of Cypress and Gum trees.

Pine Trees are a common sight in the Piedmont area, including the Long Leaf (state tree), Loblolly, Shortleaf, and Virginia Pine. Sweet Gum and Tulip Poplars spring up beneath the tall pines, later giving way to an Oak-Hickory Climax forest. Dogwood (the state flower) decorates the understory. The abundance of plants reaches extraordinary proportions in the Mountain region. The deciduous forests on the lower slopes contain Carolina Hemlock, Silver Bell, Yellow Buckeye, Sugar Maple, Yellow Birch, Tulip Poplar, and Beech. Spruce and Fir dominate the highest mountain peaks. Twenty-seven plant species are listed as endangered.



*Pleasure Island – Sea Oats*

The White-tailed Deer is the principal big game animal of North Carolina, and the Black Bear is a tourist attraction in the Great Smoky Mountains National Park. The Wild Boar was introduced to the mountains during the 19<sup>th</sup> century; beavers have been reintroduced and are now the state's principal furbearers. The largest native carnivore is the Bobcat.

North Carolina game birds include the Bobwhite Quail, Mourning Dove, Wild Turkey, and numerous duck and goose varieties. Trout and Smallmouth Bass flourish in the clear mountain streams of North Carolina, while Catfish, Pickerel, Perch, Crappie, and Largemouth Bass thrive in fresh water. The sounds and surf of the coastal area yield Channel Bass, Striped Bass, Flounder and Bluefish to anglers.

The Gray Wolf, Elk, Eastern Cougar, and Bison are extirpated in North Carolina. The American Alligator, which is protected by the state, has returned in large numbers to eastern swamps and

lakeshores. Thirty animal species have been listed by the U.S. Fish and Wildlife Service as threatened or endangered including the Bald Eagle, Red-Cockaded Woodpecker, four species of whale, and five species of sea turtles. This diversity of wildlife and vegetation in the state is considered to be among the greatest in the nation.



### **North Carolina's State Symbols from Nature**

Bird: Cardinal

Fish: Channel Bass

Flower: Dogwood

Tree: Long-leaf Pine

Reptile: Eastern box turtle

Carnivorous Plant: Venus flytrap

Shell: Scotch Bonnet

Wildflower: Carolina Lily



## Chapter 2

### Demand for Outdoor Recreation

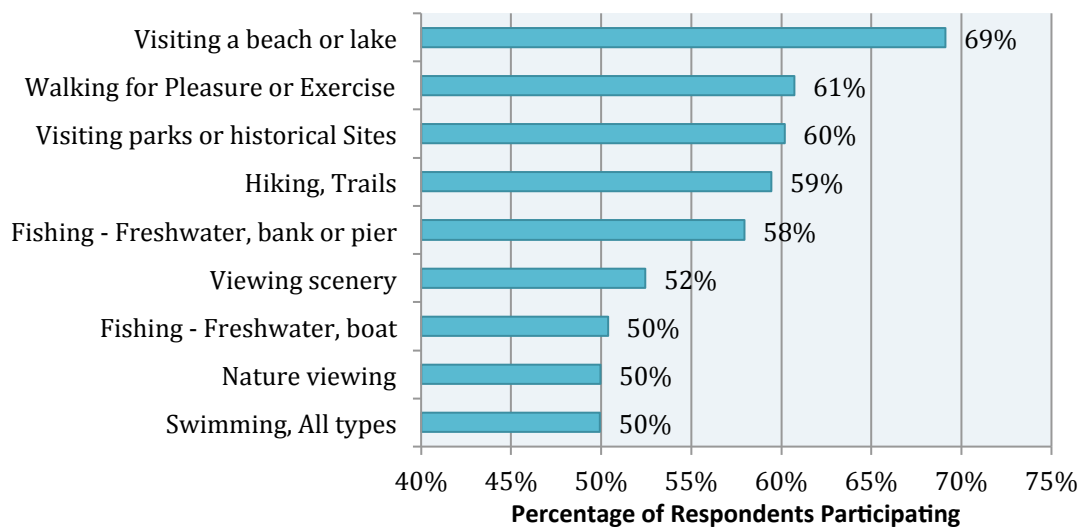
Public participation is a critical and necessary component in creating a planning document. The North Carolina Division of Parks and Recreation conducted a public input survey to evaluate demand for, participation in, and perceptions of outdoor recreation. The survey was conducted online using Survey Monkey and was distributed via multiple channels. In total, the study yielded over 17,000 responses.

Questions from the survey broadly address areas such as outdoor recreation participation, satisfaction with statewide outdoor recreation opportunities, motivation for participation, barriers to participation, and attitudes about the recreation provider's priorities.



#### Participation in Outdoor Recreation Activities

In order to understand trends and popularity among outdoor recreation activities, respondents were asked to identify the activities they or household members participate in or have participated in over the past five years. The most popular activity was visiting a beach or lake, with 69 percent participating. Walking for pleasure or exercise, and visiting parks or historic sites are activities for 61 and 60 percent of respondents respectively. Over half of all respondents participate in hiking on trails (59 percent) and freshwater fishing (58 percent) (Figure 2.1). Other activities that have at least half of respondents participating are viewing scenery, fishing from a boat, nature viewing and swimming. For the participation rates for all 80 activities included on the public survey, refer to the tables in Appendix C.



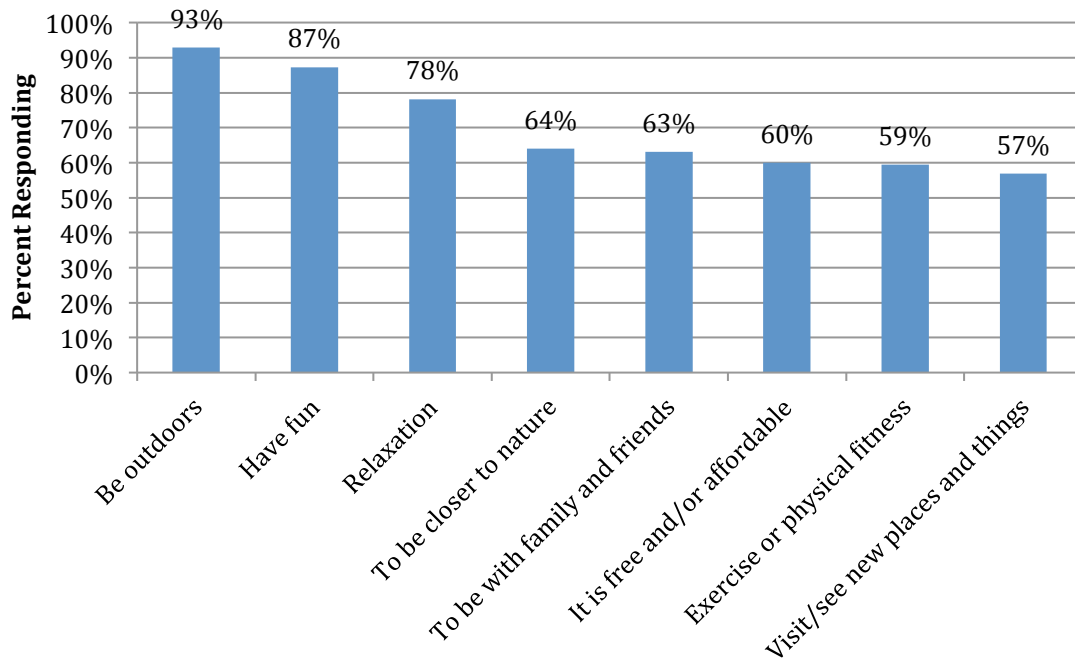
**Figure 2.1 Most popular outdoor recreation activities**

### **Why North Carolinians Recreate**

Respondents were asked to describe their motivations for participating in outdoor recreation activities. The most popular answers were, being outdoors (93 %), followed by having fun (87 %) and relaxing (78 %). (Figure 2.2) Respondents also wanted to be closer to nature and spend time with family and friends.





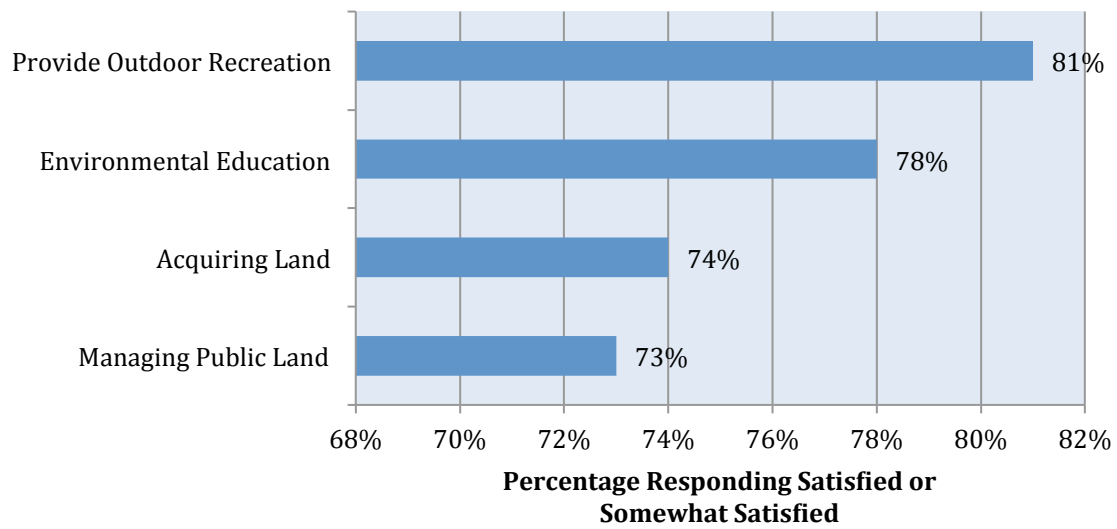


**Figure 2.2 Why North Carolinians Recreate Outdoors**

### **Satisfaction with Park Management**

North Carolina residents are generally satisfied with the parks available to them. That's important because over 90 percent of those surveyed responded that local and state parks are extremely important to them. The highest levels of satisfaction are with efforts to provide outdoor recreation and environmental education. About 80 percent of respondents were either satisfied or somewhat satisfied with these efforts. In contrast, about 70 percent of respondents are satisfied or somewhat satisfied with efforts to acquire and manage public land. (Figure 2.3)

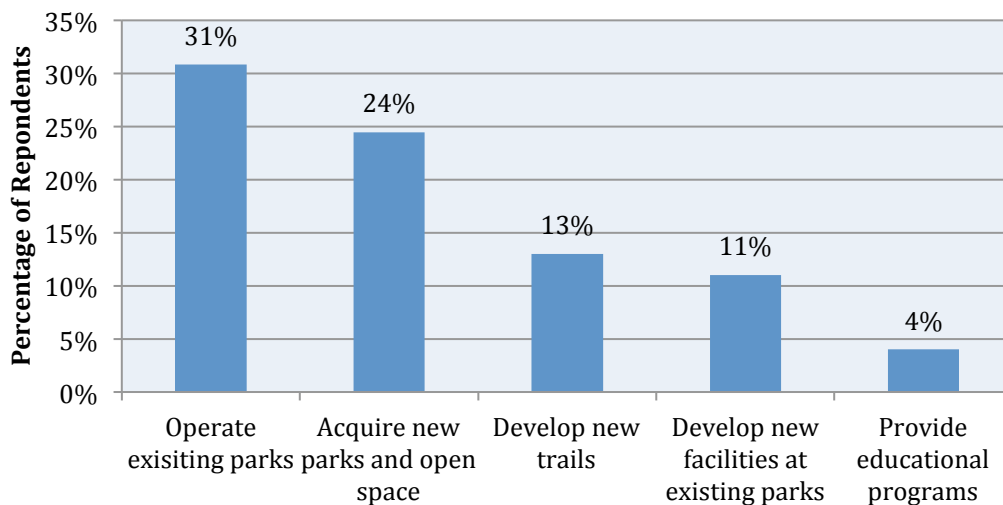




**Figure 2.3 Satisfaction with park management**

### Priorities for Park Management

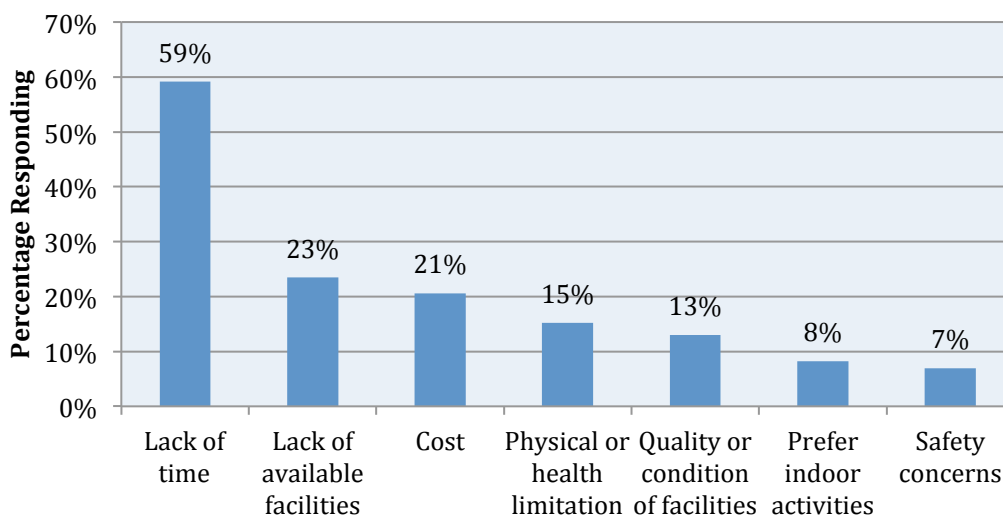
What are public priorities for parks in North Carolina? Survey respondents were asked to identify their priorities for several management objectives. The most popular top priority was “operate existing parks” (31 percent of respondents), followed closely by “acquire new parks and open space” (24 percent). Other priorities are to develop new trails, the top priority of 13 percent of respondents and to develop new facilities at existing parks (11 percent). (Figure 2.4)



**Figure 2.4. Public Priorities for park management**

## Barriers to Participation in Outdoor Recreation

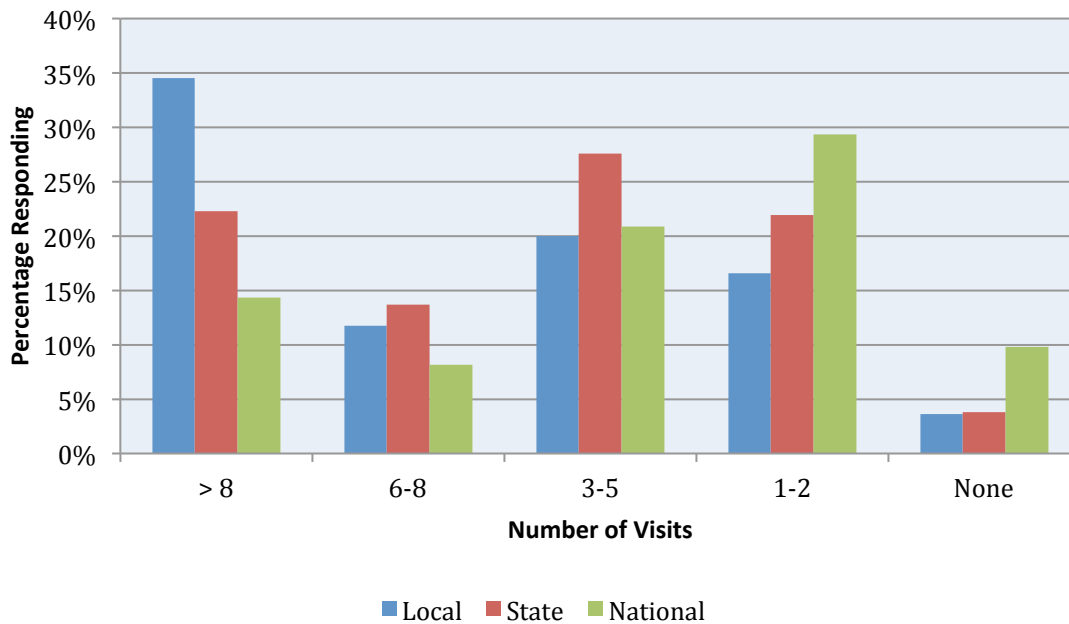
Alongside motivation and satisfaction, it is equally important to understand the barriers to outdoor recreation participation. Not surprisingly, a lack of time was the predominant barrier (59 percent). Nearly one quarter of respondents indicated that a lack of available facilities (23 percent) and cost (21 percent) are barriers to participation. (Figure 2.5)



**Figure 2.5. Barriers to participation in outdoor recreation**

## Frequency of Visits – Local, State and National Parks

Over one third (35 percent) of respondents reported having visited a local park more than eight times over the past twelve months, with 20 percent having visited at least three times. Somewhat lower percentages of respondents (22 percent and 14 percent respectively) visited state and national parks more than 8 times in the past twelve months. Roughly half of respondents visited local, state and national parks with the same frequency in the past twelve months (47, 50, and 47 percent respectively).

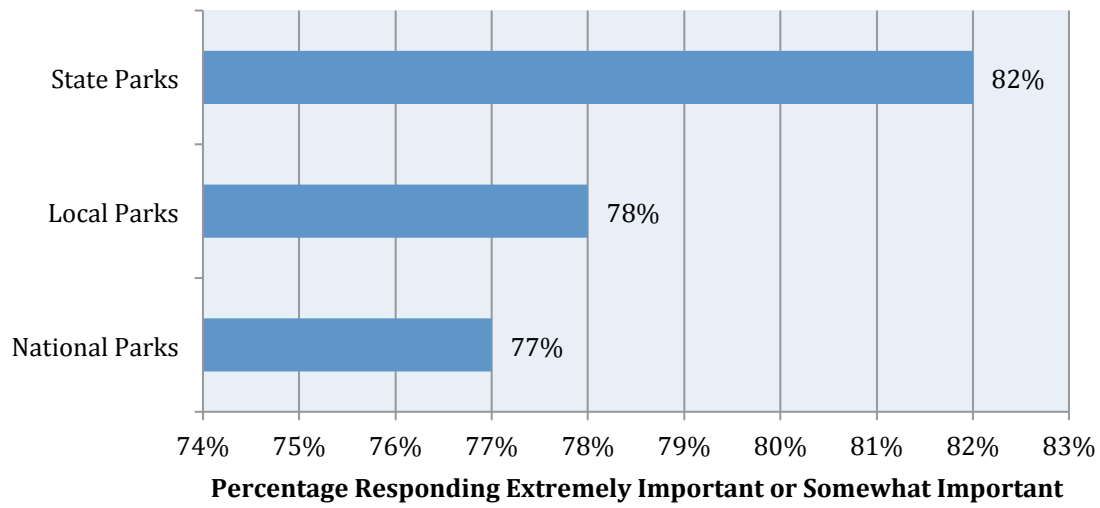


**Figure 2.6. Frequency of Visits to Local, State and Federal Parks**

### **Public Funding for Park Land and Facilities**

Consistent and adequate financial resources are required to address local, state, and federal outdoor recreation needs. Among these needs are acquisition of new parks and open space, development of new facilities at existing recreation sites, operation and maintenance of existing infrastructure and facilities, transforming existing facilities to serve new purposes, and future planning. Securing appropriate ways of funding outdoor recreation resources, as cost and demand increase, remains a challenge.

As mentioned earlier in this chapter, survey respondents participate in outdoor recreation in state parks frequently. It stands to reason that a large majority of respondents (81 percent) think it is extremely or somewhat important to spend public funds to acquire land and develop outdoor state parks and recreation areas in North Carolina. In addition, a majority of respondents think it is extremely or somewhat important to spend public funds to acquire land and develop outdoor recreation areas on both the local (78 percent), and federal (77 percent) levels.



**Figure 2.7. Importance of Public Funding for Park Land and Recreation Facilities**



## **Survey of Recreation Managers**

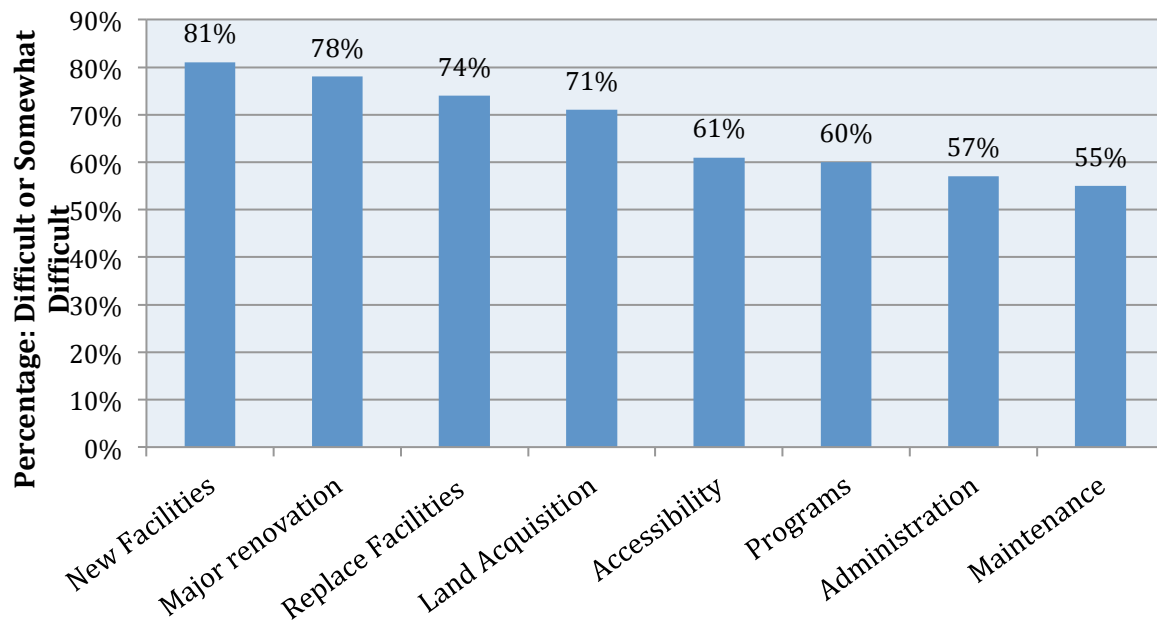
Recreation providers from across North Carolina completed an online survey designed to better understand the opportunities and challenges faced by recreation managers. Included in the study were recreation providers representing all government sectors; federal, state and local. Quasi-public/ non-profit recreation providers were also included as they have similar mandates to serve the public at-large.



### **Management Challenge: Obtaining Funding**

Public recreation managers were asked to respond to four questions about the relative difficulty they perceive in accomplishing objectives related to providing park and recreation services to the public. The first question dealt with the challenge of obtaining funding for park facilities, land acquisition, programming and maintenance, etc. The providers rated obtaining funding for new facilities (81%), major renovations (78%), facility replacement (74%) and land acquisition (71%) more difficult. The values are the combination of managers responding either difficult or somewhat difficult. (Figure 2.8).



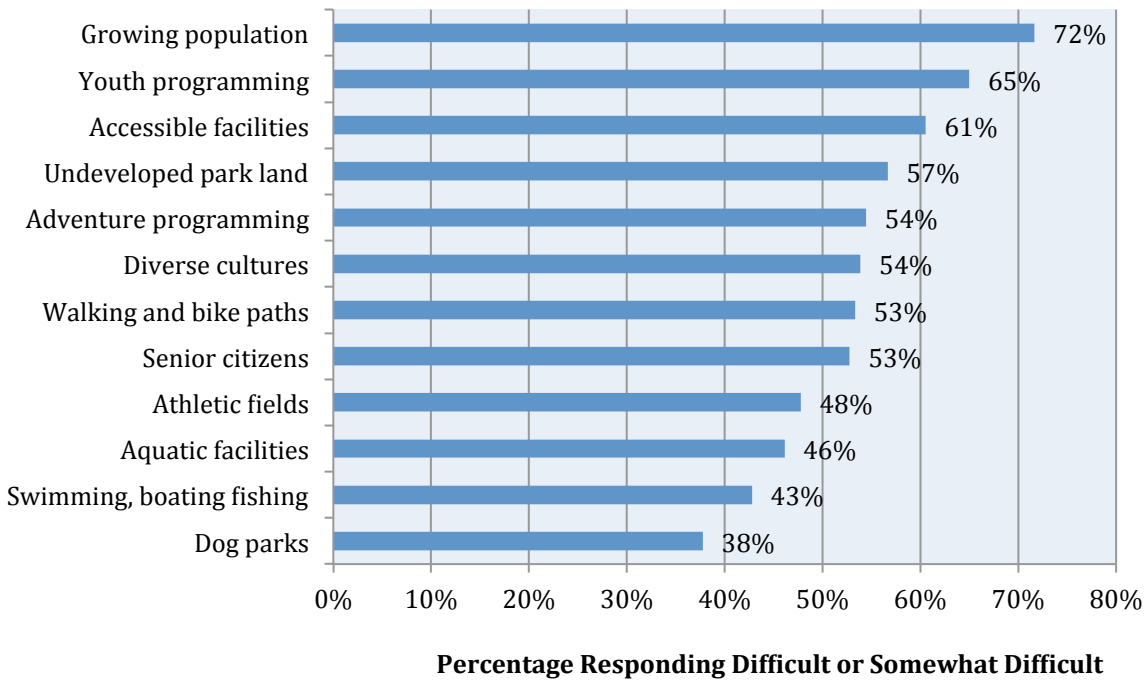


**Figure 2.8. Management Challenge: Difficulty Obtaining Funding**

#### **Management Challenge: Meeting Public Needs**

Public managers were asked to rate the difficulty of meeting public needs for a variety of purposes. The top responses, as measured by the managers rating the items as either difficult or somewhat difficult are: the needs of a growing population (72%), youth programming and facilities (65%), accessibility for people with disabilities (61%) and the need to acquire undeveloped park land (57%). (Figure 2.9)

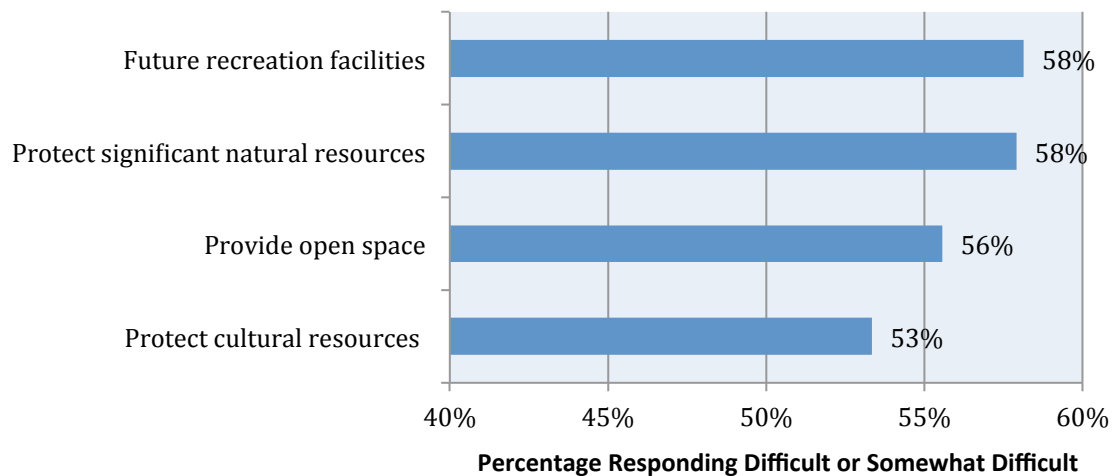




**Figure 2.9. Meeting Public Needs**

#### **Management Challenge: Acquiring Land for the Future**

Public managers were asked to rate the difficulty of acquiring land for a variety of purposes. The top responses, as measured by the managers rating the items as either difficult or somewhat difficult are: land for future recreation facilities (58%), for protecting significant natural resources (58%), to provide open space (56%) and the need to protect cultural resources (53%). (Figure 2.10)

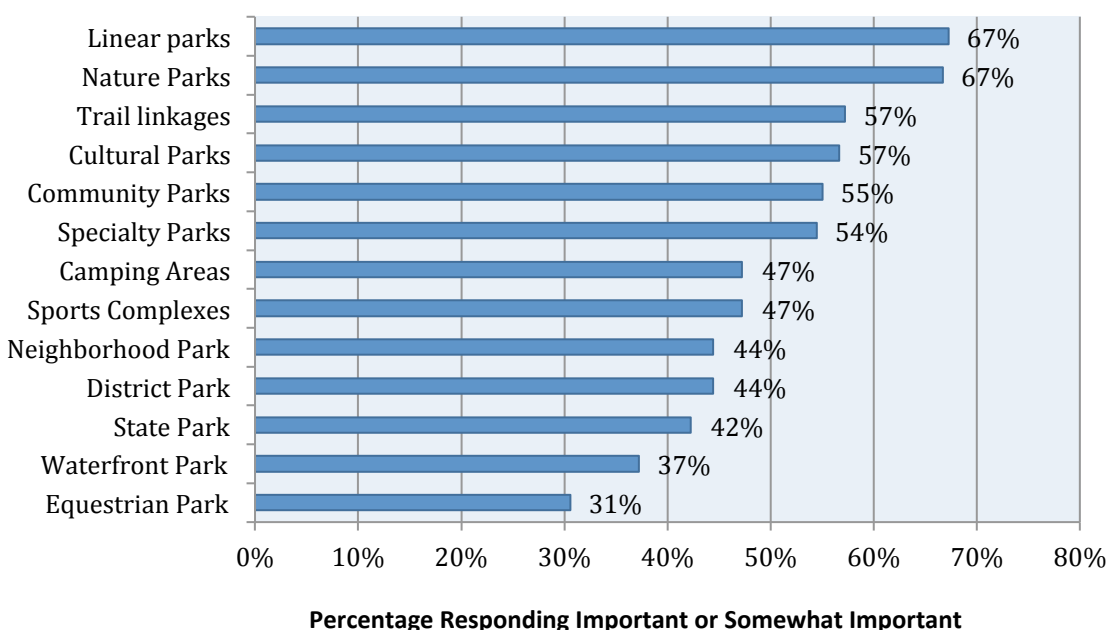


**Figure 2.10. Management Challenge: Acquiring Land for the Future**



### Priorities: Types of Areas Currently Needed

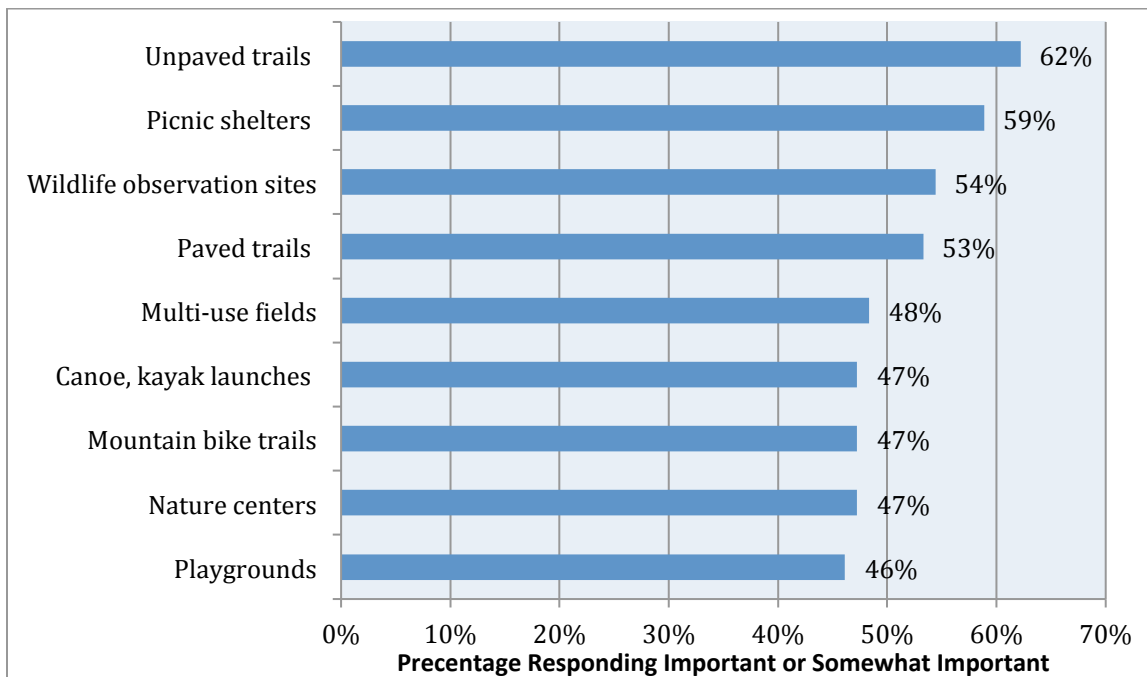
Public recreation providers were asked to identify which types of areas are currently needed in their park system. For each type of area, the respondents had four choices: important, somewhat important, not important and not applicable. Two types of areas received the highest rating; linear parks, such as greenways and parks along rivers or streams, and nature / conservation parks. In each case, 67 percent of respondents chose either “important or “somewhat important”. Other types of area seen as either important or somewhat important by at half of the public recreation providers are trail linkages to other jurisdictions (57 percent), cultural / historic parks (57 percent), community parks (55 percent), and specialty parks such as water parks, skate parks and dog parks (54 percent). (Figure 2.11)



**Figure 2.11. Priorities: Types of Areas Currently Needed**

### Priorities: Types of Facilities Currently Needed

Public recreation providers were asked to identify which types of facilities are urgently needed in their park system. For each type of facility, the respondents had four choices: urgent, somewhat urgent, not urgent and not applicable. Types of facilities seen as either urgent or somewhat urgent by at least half of the public recreation providers are unpaved trail (62 percent), picnic shelters (59 percent), wildlife / nature observation sites (54 percent), and paved trails (53 percent). (Figure 2.12) For a complete listing of facilities covered by the survey, refer to Appendix D.



**Figure 2.12. Priorities: Types of Facilities Currently Needed**



## **Chapter 3: Supply of Outdoor Recreation Resources**

### **The Outdoor Recreation Opportunity Spectrum**

Outdoor recreation encompasses a great variety of outdoor recreational activities because people look for many different types of experiences. The desire for different experiences causes people to choose between solitude or crowds, natural surroundings or man-made facilities, and physically challenging or relaxing activities. Table 3.1 summarizes the outdoor recreational spectrum by presenting its opposite ends. Urban and modern settings, activities, and experiences are contrasted with the primitive and remote end of the spectrum. These distinctions are based on the Outdoor Recreation Opportunity Spectrum developed by the U.S. Forest Service as a framework for describing outdoor recreation in terms of experience, activities and settings.

The spectrum, or range of resources, is also helpful in understanding the different roles played by local, state and federal agencies that manage land and facilities for public outdoor recreation. The federal government manages a large amount of the undeveloped land and water used for outdoor recreation in North Carolina. At the other end of the spectrum, local governments and the private sector provide the bulk of highly developed recreation resources. In North Carolina, state-owned outdoor recreation lands are generally more resource based than most southeastern states.

Natural resources and man-made facilities provide the settings needed for outdoor recreation. Natural resources vary from settings like ocean beaches and scenic mountain vistas to urban open space. A description of park and recreation area classes is presented in Table 3.2.

As much as any trait, North Carolina's outdoor recreation resources can be characterized by their diversity. One common characteristic these recreation resources share is their dependence on land and water resources. Any land or water resource that is used to produce satisfying leisure experience is a recreation resource.

Outdoor recreation activities can be divided into those that depend primarily on a man-made facility and those that depend primarily on a natural resource. The facility-dependent activities, such as tennis courts, can be placed at many locations and still provide a similar experience. Resource-dependent activities, such as sailboating, must be located where suitable natural resources are available.

**Table 3.1. The Spectrum of Outdoor Recreation Activities**

	<b>MODERN/URBAN</b>	<b>PRIMITIVE/REMOTE</b>
<b>SETTINGS</b>		
<b>PROXIMITY</b>	close to home	far from home
<b>SIZE</b>	less than 100 acres	several thousand acres
<b>FACILITIES</b>	extensive facilities	limited or no facilities
<b>NATURAL RESOURCES</b>	man-made environment dominates; natural resources secondary	natural environment dominant; little/no development
<b>ACTIVITIES:</b>	facility dependent	natural resource dependent
<b>EXPERIENCES:</b>		
<b>LEISURE TIME</b>	Participation in short time periods possible	Substantial blocks of time required for participation
<b>MANAGEMENT CONTROLS</b>	More obvious staff presence and controls to provide services and manage greater public use	On-site regimentation low, with controls primarily off-site
<b>SOCIAL INTERACTION</b>	Potentially large numbers of users on-site and in nearby areas	Few people encountered per day
<b>CHARACTER OF EXPERIENCE</b>	Opportunities for competitive and spectator sports and for passive uses of developed parks are common; contact with other people is prevalent, as is convenience of sites and opportunities.	High probability of experiencing isolation from sights and sounds of humans; independence; closeness to nature; tranquility and self-reliance through the application of primitive outdoor skills in an environment that offers challenge and risk.

Sources: *R. O. S. Users Guide*, U.S. Forest Service, Department of Agriculture. *Recreation, Park and Open Space Standards and Guidelines*, National Recreation and Park Association

An inventory of public recreation sites has been performed to measure the supply of the recreational resources in each county. For information about the methodology, refer to Appendix B. The inventory used the area and facility classifications discussed previously to count the parks and facilities at public recreation sites in North Carolina. The statewide summary for the park acreage inventory is presented in Table 3.3, and the summary of recreational facilities is shown in Table 3.4 and 3.5.

**Table 3.2 Park and Recreation Area Class Names and Descriptions**

Area Name	Description
Neighborhood Park	Area for active recreation such as field and court games or using a playground or splash pad. Can also be smaller informal parks for open space activities. Two to eight acres is a typical size. Examples include mini-parks serving residential areas, playgrounds, sports fields and combination playgrounds/sports fields/ passive natural areas.
Community Park	Area providing a wide array of active recreational opportunities including a recreation center with a gymnasium, athletic fields, swimming pool, hard surface courts, and picnicking areas. Natural or landscaped areas are provided for passive recreation. 10-20 acres is a typical size. Examples include large park/school complexes; recreation center/ pool/sports field and court complexes; and community center/park complexes.
District/Metro Area Park	Area serving one or more suburban or rural communities. Similar to the Community Park, these areas offer both intensive recreation activities and natural environment areas. Typical size is 20-100 acres. Examples include intensively developed county-wide or regional parks, and developed public recreation sites at large reservoirs.
Local Parks	Combines Neighborhood, Community, and District/Metro Area parks classes described above.
Regional/State Parks	Area of natural quality for natural resource-based outdoor recreation. Generally, 80 percent of the land is reserved for conservation and natural resource management with less than 20 percent developed for recreation. Typical size is 3,000-5,000 acres. Examples include state parks, state recreation areas, state natural areas, educational state forests and large natural resource-based county parks. Activities include nature study, picnicking, camping, fishing, boating, swimming, and various trail uses.
Dispersed Use/ Conservancy Area	Area for protection and management of the natural environment with recreation use as a secondary objective. Multiple-use management approaches produce natural resource outputs such as timber, agricultural produce and minerals. Examples include state gamelands, multiple use areas of national and state forests, reservoir shoreline buffer lands, and Blue Ridge Parkway acreage. These sites are generally large enough to manage the primary natural resource while providing secondary recreational uses.
Wilderness Area	Area characterized by unmodified natural environment of fairly large size. Low interaction between users, and evidence of others is minimal. Motorized use is not permitted. Typical size is 5,000-15,000 acres. Examples are congressionally designated National Wilderness Areas.

**Table 3-3. Outdoor Recreation Acreage by Operator and Site Classification**

SITE CLASSIFICATION	OPERATOR CLASSIFICATION				Total
	FEDERAL	STATE	MUNICIPAL	COUNTY	
Local	0	0	56,215	50,970	107,185
Dispersed Use	2,681,214	755,645	0	0	3,436,859
Totals:	2,681,214	755,645	56,215	50,970	3,544,044

**Table 3-4. Statewide Totals for Outdoor Recreation Facilities Primarily at Local Parks**

ACTIVITY	FACILITY	MUNICIPAL	COUNTY	TOTAL
Baseball	Fields	784	442	1226
Basketball	Courts	834.5	287	1121.5
Bocce	Courts	42	35	77
Disc Golf	Courses	35	33	68
Fitness / Exercise	Fitness Station Area or Trail	144	60	204
Football	Fields	131	136	267
Playground Use	Playground	1464	517	1981
Playing with Dogs	Dog Parks	37	16	53
Shuffleboard	Courts	48	24	72
Skateboarding	Skateparks	23	4	27
Soccer	Fields	490	391	881
Softball	Fields	539	342	881
Swimming	Pools	147	42	191
Team Sports	Multi-Purpose Fields	879	488	1367

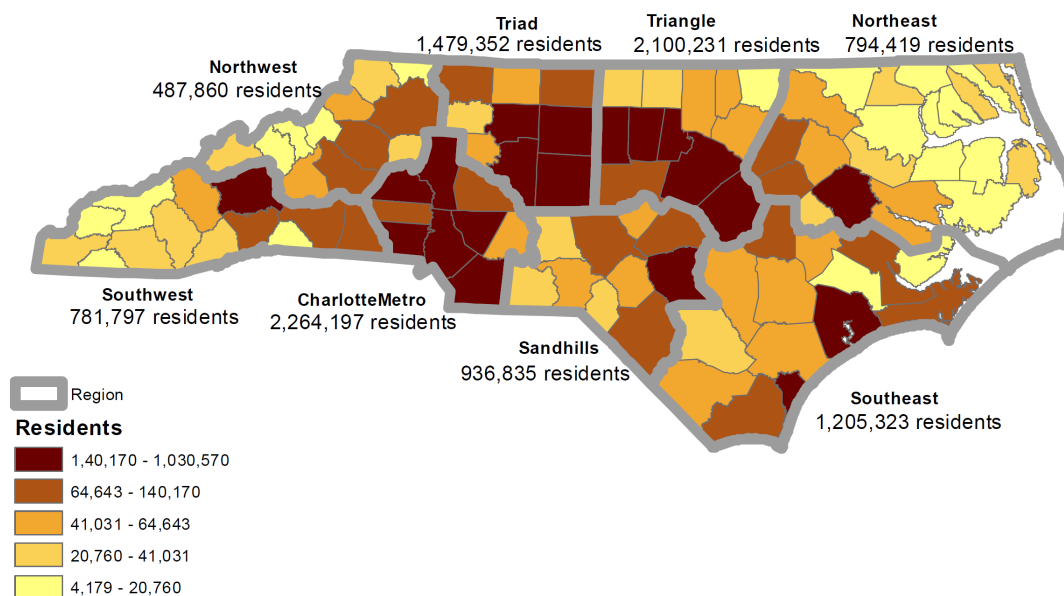
ACTIVITY	FACILITY	MUNICIPAL	COUNTY	TOTAL
Tennis	Courts	1566	563	2129
Volleyball	Courts	249	158	407
Water Play	Sprayground/ Splashpad	14	15	29
Water Play	Waterparks	4	3	7

**Table 3-5. Statewide Totals for Outdoor Recreation Facilities – Local, State and Federal Parks**

ACTIVITY	FACILITY	FEDERAL	STATE	MUNICIPAL	COUNTY	TOTAL
Picnicking	Shelter	34	125	1388	638	2185
Trails (All Types)	Miles	2019	1086	1282	799	5186

### Distribution of Recreation Resources and Population by County and Region

Population totals for eight regions of the state are shown on the map in Figure 3.1. For information about the characteristics of the eight regions, refer to Appendix B. North Carolina's population is most concentrated in the central portion of the state, which includes the Piedmont Crescent, roughly defined by the Interstate 85 and Interstate 40 corridor from the Charlotte Metro area, through the Triad and into the Triangle area.

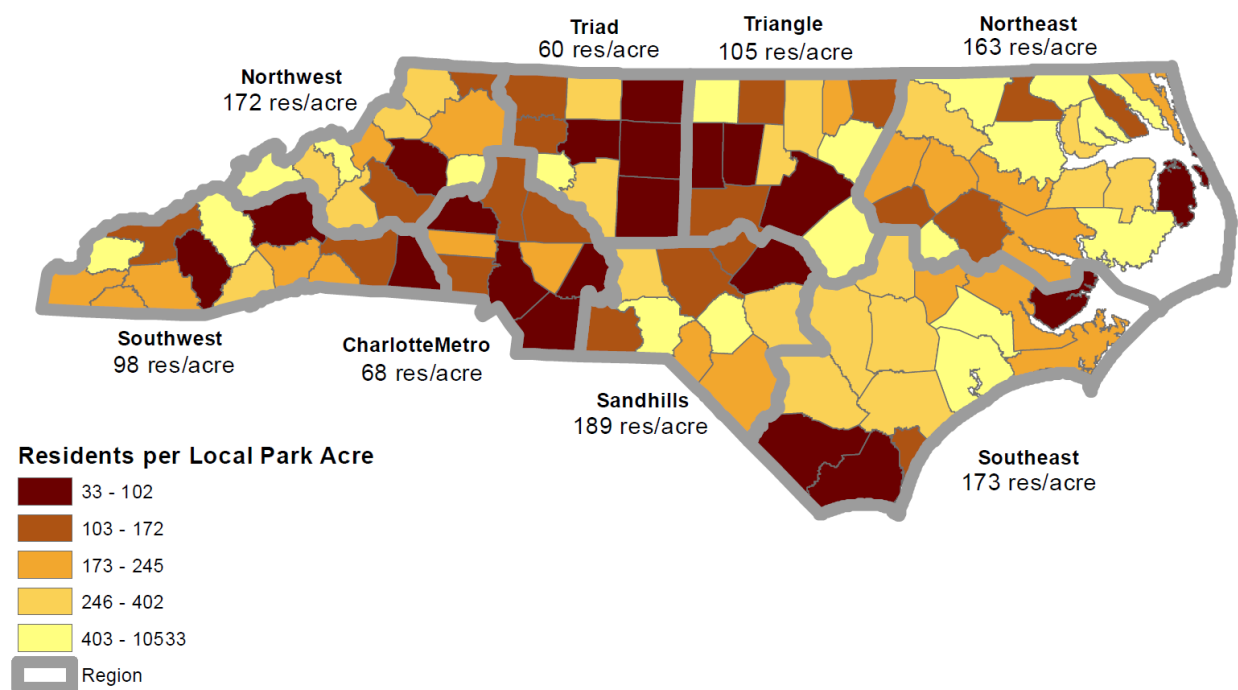


**Figure 3.1 Projected North Carolina Population by Region in 2015**

The Charlotte Metro contains Mecklenburg County with the highest population. The Triad contains Winston Salem, Greensboro and High Point in Forsyth and Guilford counties. The Triangle region includes Durham and Wake counties. Wake County is the second most populated county in the state.

To compare counties and geographic regions, population is divided by the park acreage and recreation facility totals for the county and region. The calculations indicate the number of residents per park acre or recreation facility.

Figure 3.2 shows the counties shaded according to the residents per local park acre as well as average for each of the eight regions. Figures 3.2 through 3.7 display similar information the residents per facility for several recreational facilities. On each map, counties with darker shading have fewer residents per park acre or recreation facility (a greater availability for each resident) and regions with lighter shading have more residents per resource (a lower availability for each resident).

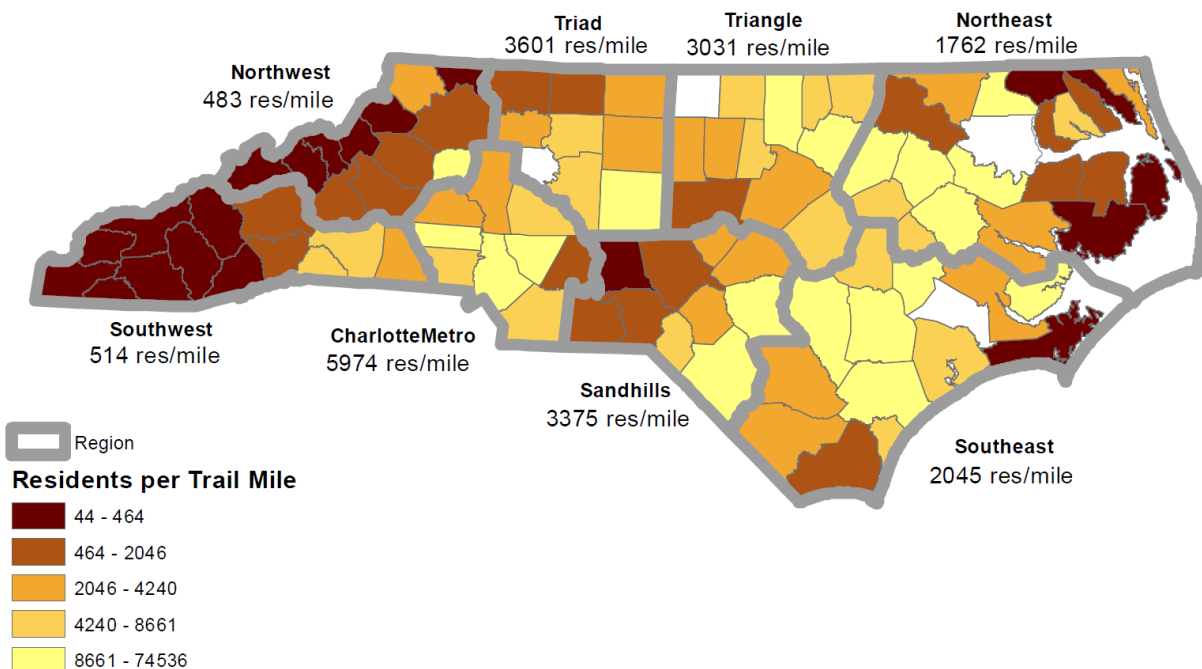


**Figure 3.2 County Residents per Local Park Acre**

**Residents per Local Park Acres:** Residents per local park acre in North Carolina counties ranges from a low of 40-45 residents per acre in Guilford and Mecklenburg counties to a high of nearly 2,000 in Gates and Graham counties. The median for the state is about 200 residents per acre in four counties: Lincoln, Carteret, Vance and Clay. Counties with fewer residents per park acre have a greater availability for each resident and counties with more residents per acre have a lower availability for each resident.



The more populated regions of the state also have more local park acreage for their residents. The three regions that define the Piedmont Crescent – Charlotte Metro, Triad and Triangle – have fewer residents per local park acre. The Triad and Charlotte Metro regions have 60-70 residents per acre. The Triangle region has 105 residents per acre. The Sandhills region has nearly 200 residents per park acre or more people sharing fewer acres.



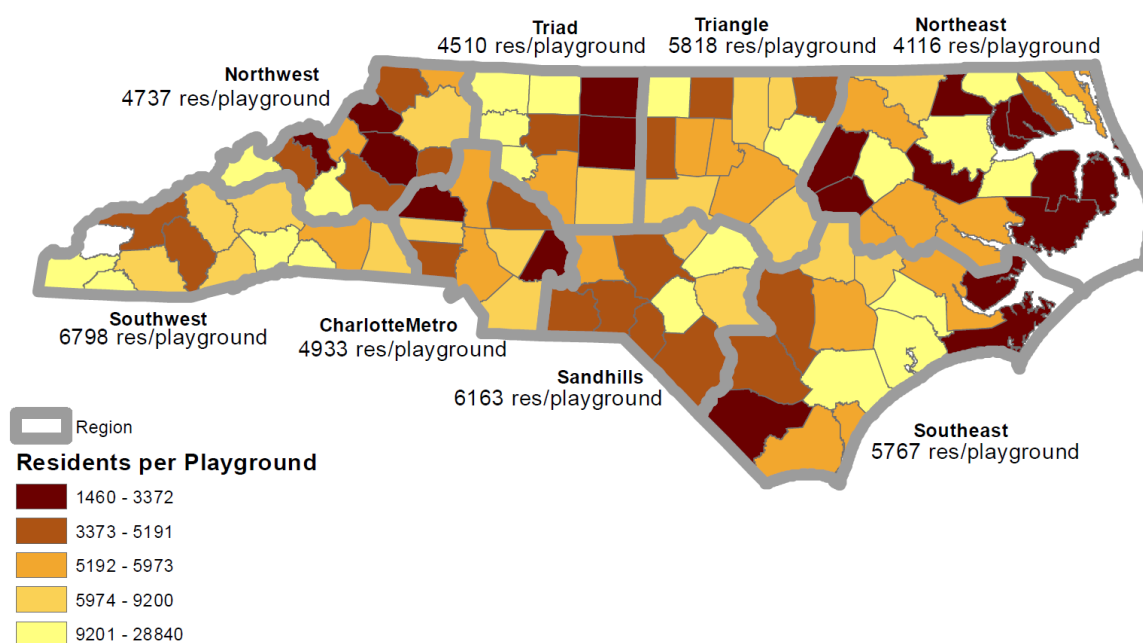
**Figure 3.3 County Residents per Trail Mile (All types)**

**Residents per Trail Mile (all types):** Residents per trail mile in North Carolina counties range from a low of 50-150 residents per trail mile in Graham, Clay, Transylvania, and Macon counties to a high of about 30,000 in Lenoir and Nash counties. The median for the state is about 3,000 residents per trail mile in Currituck, Lenoir and Iredell counties. Counties with fewer residents per trail mile have a greater availability for each resident and counties with more residents per trail mile have a lower availability for each resident.

The Northwest and Southwest regions have more trail miles for their residents and visitors with the availability of state and national parks and forests. The regions have about 500 residents per trail mile. The Triangle region represents the mid-point with about 3,000 residents per trail mile. The Charlotte Metro region has nearly 6,000 residents per trail mile or more people sharing fewer trail miles.

**Residents per Playground:** Residents per playground in North Carolina counties range from a low of 1500-2000 residents per playground in Stanly and Dare counties to a high of about 25,000 in Pender and Caswell counties. The median for the state is about 5,600 residents per playground in four counties: Alexander, Rutherford, Wake and Craven. Counties with fewer residents per playground have a greater availability for each resident and counties with more residents per playground have a lower availability for each resident.

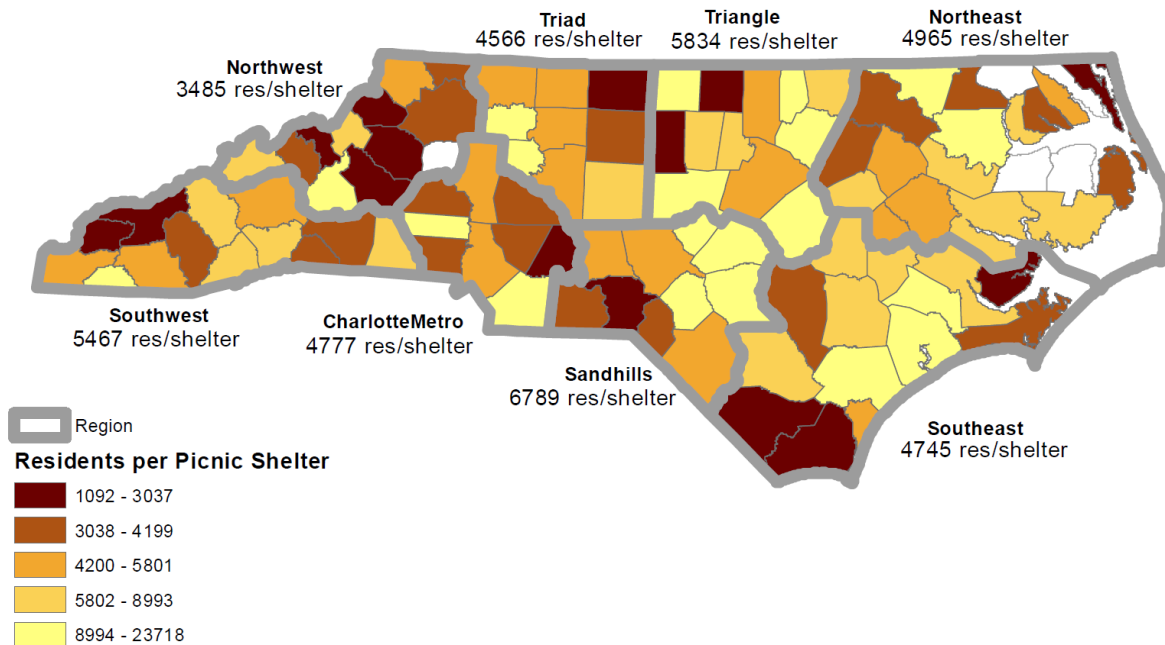
The Northeast region of the state has more playgrounds for their residents. The region has about 4,000 residents per playground. The Charlotte Metro region represents the mid-point with about 5,000 residents per playground. The Southwest region has nearly 6,800 residents per playground or more people sharing fewer playgrounds.



**Figure 3.4 County Residents per Playground**

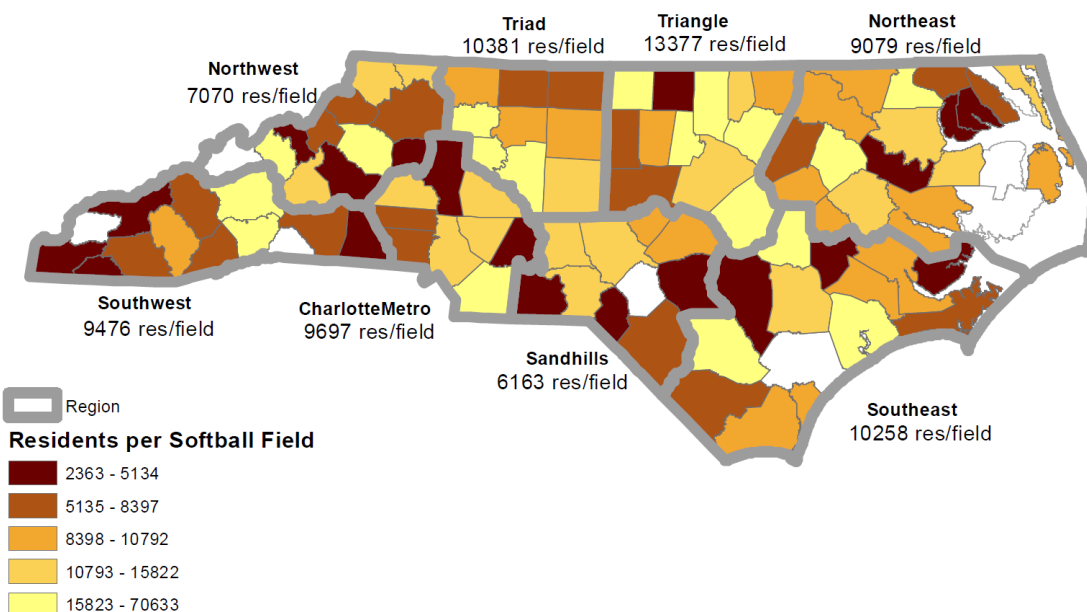
**Residents per Picnic Shelter:** Residents per picnic shelter in North Carolina counties range from a low 1,500 residents per shelter in Columbus and Mitchell counties to a high of about 25,000 in Pender and Caswell counties. The median for the state is about 5,500 residents per shelter in two counties: Ashe and Mecklenburg. Counties with fewer residents per shelter have a greater availability for each resident and counties with more residents per shelter have a lower availability for each resident.

The Northwest region of the state has more picnic shelters for their residents. The region has about 3,500 residents per shelter. The Charlotte Metro region represents the mid-point with about 5,000 residents per shelter. The Sandhills region has nearly 6,800 residents per picnic shelter or more people sharing fewer shelters.



**Figure 3.5 County Residents per Picnic Shelter**

**Residents per Softball Field:** Residents per softball field in North Carolina counties range from a low 2,500 residents per softball field in Perquimans, Scotland and Stanly counties to a high of about 50,000 in Hertford and Edgecombe counties. The state's median is about 10,000 residents per softball field in three counties (Harnett, Warren and Jackson). Counties with fewer residents per softball field have a greater availability for each resident and counties with more residents per softball field have a lower availability for each resident.

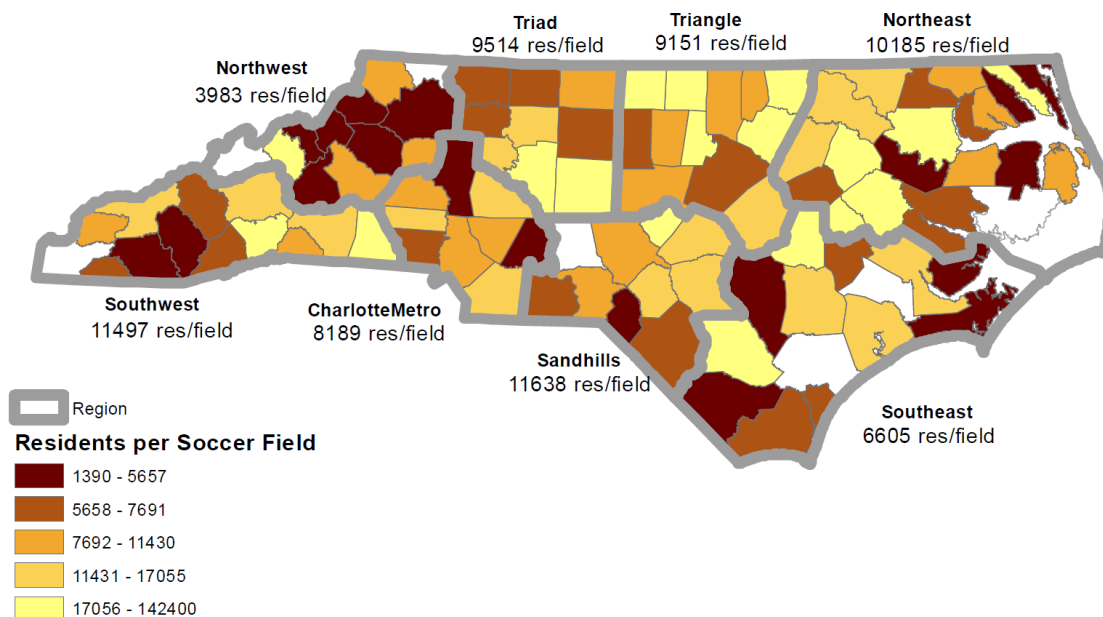


**Figure 3.6 County Residents per Softball Field**

The Sandhills region of the state has more softball fields for their residents. The region has about 6,500 residents per field. The Charlotte Metro and Southwest regions represents the mid-point with about 9,500 residents per field. The Triangle region has about 13,000 residents per field or more people sharing fewer fields.

**Residents per Soccer Field:** Residents per soccer field in North Carolina counties range from a low of less than 2,000 residents per soccer field in Watauga and Carteret counties to a high of about 50,000 in Cleveland and Randolph counties. The state median is about 9,500 residents per soccer field in Burke and Perquimans counties. Counties with fewer residents per soccer field more access to fields for each resident and counties with more residents per soccer field have less access for each resident.

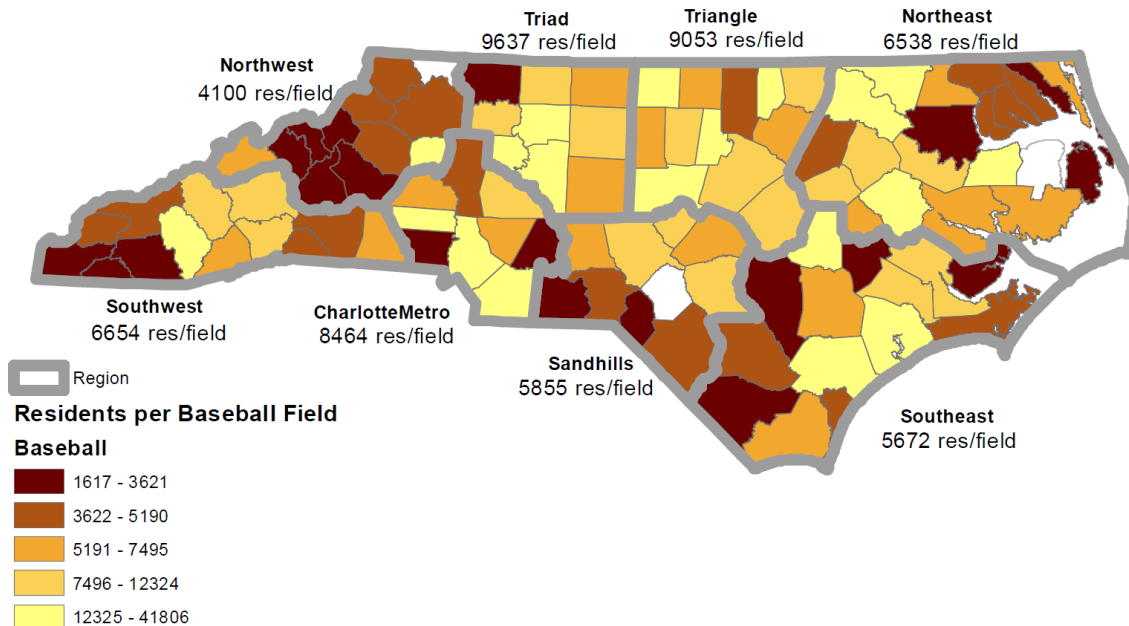
The Northwest region of the state has more soccer fields for their residents with about 4,000 residents per field. The Triangle and Triad regions are at the mid-point about 9,500 residents per field. The Sandhills and Southwest regions have about 11,500 residents per field or more people sharing fewer fields.



**Figure 3.7 County Residents per Soccer Field**

**Residents per Baseball Field:** Residents per baseball field in North Carolina counties range from a low of less than 2,000 in Anson, and Scotland counties to a high of more than 35,000 in Onslow and Davie counties. The state median is about 6,000 residents per baseball field in Person and Catawba counties. Counties with fewer residents per baseball field have greater access for each resident and counties with more residents per baseball field have less access.

The Northwest region of the state has more soccer fields for their residents. The region has about 4,000 residents per field. The Northeast and Southwest regions represent the mid-point with about 6,500 residents per field. The Triad and Triangle regions have more than 9,000 residents per field or more people sharing fewer fields.



### Figure 3.8 County Residents per Baseball Field

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## **Chapter 4**

### **ROLES AND RESPONSIBILITIES**

This chapter identifies and describes state, federal and local government agencies and programs that provide and manage parks and open space. It also identifies and describes the primary non-profit and commercial groups involved in providing outdoor recreation to the state's citizens.

#### **STATE PROGRAMS**

##### **N.C. State Parks System**

The North Carolina State Parks System was created in 1916 when Mount Mitchell became the first state park. The Division of Parks and Recreation, within the Department of Environment and Natural Resources, manages the state parks system. The North Carolina state parks system exists for the enjoyment, education, health, and inspiration of all our citizens and visitors.

The mission of the state parks system is to conserve and protect representative examples of the natural beauty, ecological features, and recreation resources of statewide significance; to provide outdoor recreation opportunities in a safe and healthy environment; and to provide education opportunities that promote stewardship of the state's natural heritage.





The State Parks System manages 35 state parks, four recreation areas, seven state lakes and 20 natural areas that encompass about 225,000 acres as well as four state trails and four state rivers. These park units protect a variety of resources and also provide a multitude of recreational uses, ranging from simple day activities - such as self-guided nature walks - to tent and trailer camping.

The Mountains-to-Sea State Trail will traverse North Carolina and connect Clingman's Dome in the Great Smoky Mountains National Park to Jockey's Ridge State Park on the Outer Banks. Approximately 600 miles of the proposed 1000 miles have been completed.

### **Public Beach and Coastal Waterfront Access Program**

The Public Beach and Coastal Waterfront Access Program provides matching grants to local governments to improve pedestrian access to the state's beaches and waterways. The program originally focused on beach access but was expanded in 1983 to include North Carolina's vast network of estuarine shorelines, coastal rivers and urban waterfronts.



More than 280 access sites have been constructed since the program began. Local governments are responsible for construction, operation and long-term maintenance of their sites. These sites, plus other public beach access sites, are marked with easily identified blue and orange Beach and Coastal Waterfront Access signs. The access sites range from large regional facilities with parking, restrooms, showers, dune crossovers, water fountains and life guards to small local facilities providing dune crossovers.



## North Carolina National Estuarine Research Reserve

The North Carolina National Estuarine Research Reserve is a natural outdoor laboratory where scientists, students and the public can study estuarine dynamics and learn about coastal natural areas. Established in 1982, the reserve is a collection of four representative estuarine ecosystems along North Carolina's coast. The sites contain more than 10,500 acres of barrier islands, salt marshes and tidal waters, habitat for hundreds of species of fish, bird and other wildlife.

North Carolina's estuarine system – the third largest in the nation and the fourth most productive – is exceptionally diverse. It lies within two biogeographic regions, the Virginian and the Carolinian, and has many different salinity regimes, basin types and tidal patterns. Examples include Currituck Banks, Masonboro Island and Zeke's Island.



## Educational State Forests

Seven educational state forests are managed by the NC Forest Service. They are Clemmons, Holmes, Jordan Lake, Mountain Island Lake, Rendezvous Mountain, Turnbull Creek, and Tuttle. These unique forest environments are located from the far West to the lower coastal plain. The widely varied terrain offers a rich mixture of pine and hardwood forests. Features are made accessible by a series of well-marked trails accented by exhibits and displays depicting the ecology of a managed forest.



Each forest features self-guided trails that include exhibits, tree identification signs, a forest education center and a talking tree trail. Picnic facilities further enhance the forests. Specially trained rangers are available to conduct classes for school and other youth groups. Teachers or group leaders choose from a selection of 30-minute programs that cover all aspects of the forest environment – from soil, water and wildlife to timber and forest management.

### **N.C. Department of Transportation Office of Bicycle and Pedestrian Transportation**

The Bicycle Program assists local governments with the development of bicycle programs and the construction of bicycle facilities; develops standards for designing bicycle facilities; and constructing the state bikeway system. Initiated in 1975, the state bicycle program has been designating, mapping and signing of bicycle touring routes, which direct bicyclists away from more heavily traveled roads to safer alternate routes. To date, nine routes covering 3,000 miles of roads have been developed.

### **N.C. Historic Sites**

Administered by the N.C. Department of Cultural Resources, North Carolina Historic Sites allow visitors to see the state as it was. Twenty-seven sites scattered across the state open doors of the past by preserving and interpreting the history of people that have lived in North Carolina, from Native American cultures to colonial communities to early agriculture and industry. Visitor centers with exhibits filled with artifacts and multimedia presentations are located at most sites, as are picnic facilities.



The historic sites seek to preserve significant properties and artifacts related to events, people and themes important to the state's past. These sites provide a valuable resource for teaching and learning about the past.

### **N.C. Wildlife Resources Commission**

The Wildlife Resources Commission manages and regulates the state's wildlife. The agency is responsible for enforcing boating laws on inland waters. It sells hunting, fishing and trapping licenses and registers boats owned by North Carolina residents. The agency also provides wildlife-related outdoor recreational opportunities.

The commission manages approximately two million acres of state-owned, federally owned and privately owned gamelands on which the public may fish and hunt with a special permit. These areas are scattered across the state. The commission also maintains boating access areas that provide free 24-hour access to 80 different bodies of water in North Carolina.

### **Office of Land and Water Stewardship**

The Office of Land and Water Stewardship within the North Carolina Department of Environment and Natural Resources was created in November 2013 to coordinate the efforts of the Albemarle-Pamlico National Estuary Partnership, the N.C. Clean Water Management Trust Fund, and the N.C. Natural Heritage Program.

The Albemarle-Pamlico National Estuary Partnership works to identify, protect and restore the significant natural resources of the Albemarle-Pamlico estuarine system. It is a cooperative effort jointly sponsored by the N.C. Department of Environment and Natural Resources and the U.S. Environmental Protection Agency, and in partnership with the Virginia Department of Conservation and Recreation. The program area extends across most of the Albemarle-Pamlico watershed, including the Neuse, Tar-Pamlico, Roanoke, Chowan, Lower Roanoke, and parts of the White Oak River basins.

The Clean Water Management Trust Fund provides grant assistance to conservation non-profits, local governments and state agencies across North Carolina for the protection and restoration of surface waters, including drinking water supplies; the protection of significant ecological, cultural and historic sites; and the provision of buffers around bases to protect the state's critical military mission.

The Natural Heritage Program's goal is the preservation of the natural diversity of North Carolina. The Natural Heritage Program is the first comprehensive attempt to determine, through an intensive state-wide inventory, the state's most significant natural areas. Through the inventory, areas of prime ecological significance can be identified and recommendations for protection of these areas can be made. Using the information from the heritage inventory, the state can identify areas that best represent its natural heritage and determine if these areas are being adequately safeguarded. A state register recognizes important natural areas, public and private, in conservation management. Long-term results of the program can mean that the state's resources will remain for the benefit and enjoyment of future generations while supporting economic development in the state.

This stewardship program provides monitoring and management of conservation easements and lands held by the N.C. Department of Environment and Natural Resources for stream and wetland mitigation.

### **N.C. Zoological Park**

The N.C. Zoological Park, located on approximately 2000 acres six miles southeast of Asheboro, is among the world's largest land area zoos and was the first one planned from its inception around the natural habitat concept of zoological exhibits. The purposes of the zoo are education, entertainment, recreation, research and the conservation, preservation and propagation of plant and animal life.

The indoor exhibits include the Forest Aviary, the African Pavilion and the Sonora Desert. Outdoors, the zoo offers a 300-acre African World, which exhibits African animals in a variety of natural habitats, and the North American region.



## **North Carolina Aquariums**

The aquariums were established in 1976 to promote an awareness, understanding, appreciation and conservation of the diverse natural and cultural resources of North Carolina's ocean, estuaries, rivers, streams and other aquatic environments. The aquariums are located at Roanoke Island, Pine Knoll Shores, and Fort Fisher.



## **FEDERAL PROGRAMS**

Federal roles in outdoor recreation include the management of federally owned properties such as parks, forests, wildlife preserves and reservoir areas, and the administration of financial and technical assistance programs to aid state and local governments and private citizens. In North Carolina, the federal agencies that primarily provide outdoor recreational opportunities are the Department of the Interior, the Department of Agriculture and the Department of Defense.

### **U.S. Department of the Interior**

The Department of the Interior was created by Congress in 1849. The Department's recreational responsibilities include administering the nation's scenic and historic areas; conserving, developing and utilizing fish and wildlife resources; and coordinating federal and state recreational programs.

Within the department, two agencies provide outdoor recreation resources and programs in North Carolina: The National Park Service and The U.S. Fish and Wildlife Service.

### **The National Park Service**

The National Park Service (NPS), created by Congress in 1916, is charged with conserving scenery, wildlife and natural and historical objects, and administering the nation's parks, recreational areas and historical areas. Acquisition and development of these resources for such purposes as providing camping, boating, swimming, hiking and historical interpretation are governed by NPS's determination of public need and demand for such facilities.

NPS is also involved in planning, coordinating and developing national recreation policy; conducting surveys of recreational resources and needs in the United States; and developing a plan to meet these needs. The NPS also provides financial and technical assistance for state recreational planning and land acquisition and development.



In North Carolina, the NPS administers 10 areas that are set aside for their natural, recreational and historical interest. These include the Blue Ridge Parkway, the Great Smoky Mountains National Park, Cape Hatteras National Seashore, Cape Lookout National Seashore, Moores Creek National Battleground, the Wright Brothers Memorial, the Carl Sandburg Home, Fort Raleigh National Historic Site and Guilford Courthouse National Military Park. These areas offer a wide range of public outdoor recreational activities such as camping, swimming, boating, fishing, nature study, hiking and picnicking.

The National Park Service also administers the federal Land and Water Conservation Fund (LWCF). An annual apportionment from LWCF is made available to the state for distribution to state agencies and local government entities for approved, high-quality outdoor recreational projects meeting needs identified in the Statewide Comprehensive Outdoor Recreation Plan. These funds are administered at



the state level by the Division of Parks and Recreation of the Department of Environment and Natural Resources. Since 1965 LWCF has assisted with nearly 900 projects in North Carolina with grant funds totaling nearly \$80 million.

### **U.S. Fish and Wildlife Service**

The U.S. Fish and Wildlife Service's goals for public use of its areas and facilities are to expand man's understanding of his environment and his appreciation of fish and wildlife ecology. The service provides visitors to its sites with high quality, safe and enjoyable recreational experiences oriented towards wildlife and wildlife habitat appreciation. The Service manages 11 national wildlife refuges in North Carolina comprising approximately 400,000 acres. They are Alligator River, Cedar Island, Currituck, Dismal Swamp, Mackay Island, Mattamuskeet Lake, Pea Island, Pee Dee, Pocosin Lakes, Roanoke River and Swanquarter. Most of these are limited-purpose outdoor recreation areas that provide primarily for wildlife habitat, but they also provide opportunities for hunting, fishing and photography.

### **U.S. Forest Service**

The U.S. Forest Service (and the national forest system), within the US Department of Agriculture, was created by Congress in 1905. The responsibility of the Forest Service in the field of outdoor recreation is to develop the recreational potential of national forests in conjunction with other multiple uses. The Forest Service also cooperates with other federal, state and local agencies in planning and developing recreational resources on other federal, state, local and private lands.



In North Carolina, the Forest Service administers four areas: the Croatan National Forest (160,000 acres); Nantahala National Forest (530,000 acres); Pisgah National Forest (505,000 acres); and the Uwharrie National Forest (50,000 acres). The areas, which comprise about 1.25 million acres, are a significant component of North Carolina's recreational resources. They contain some of the state's most pristine lands, including extensive woodlands, springs, streams and mountains. Within these four national forests, the Forest Service manages many developed public recreation sites.

### **National Wilderness Preservation System**

The Wilderness Act of 1964 (16 United States Code 1131) established a National Wilderness Preservation System. Management of areas in the system is the responsibility of the agency (or agencies) having jurisdiction over the areas prior to their inclusion in the system.

There are currently 12 designated wilderness areas in North Carolina, consisting of more than 110,000 acres. Eleven of these are administered by the U.S. Forest Service. They are: Ellicott Rock, Joyce Kilmer- Slickrock, and Southern Nantahala, located in the Nantahala National Forest; Linville Gorge, Middle Prong, and Shining Rock, located in the Pisgah National Forest; Birkhead Mountains, located in the Uwharrie National Forest; and Catfish Lake South, Pocosin, Pond Pine and Sheep Ridge, located in the Croatan National Forest. The U.S. Fish and Wildlife Service administers the remaining wilderness area, Swanquarter. The U.S. Forest Service is studying other areas for possible wilderness designation.

### **National Wild and Scenic Rivers System**

The National Wild and Scenic Rivers Act of 1968 (16 United States Code 1271) states that Wild or Scenic rivers must *"possess outstandingly remarkable scenic, cultural, or other similar values."* Further, the Act requires that they *"shall be preserved in a free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."*



Five rivers in North Carolina have been designated into the national system: the New River (26 miles), the Horsepasture River (4 miles), the Lumber River (81 miles), all of the Chattooga River (58 miles) and Wilson Creek (23 miles). The New, Horsepasture and Lumber rivers are also N.C. Natural and Scenic Rivers and are administered by the state.

### **National Trails System**

The National Trails System Act of 1968 (16 United States Code 1241) provides the framework for establishing a nationwide system of scenic, recreational and historical trails. The Secretary of the Interior and the Secretary of Agriculture are both authorized to administer trails in the system under the Act. The National Trails System totals over 60,000 miles in all 50 states

National recreational trails also play an important role in the National Trails System. As declared in the act, national recreational trails are intended to be established near urban areas and in established scenic areas to serve the constantly increasing outdoor recreational needs of an expanding population and to promote close-to-home recreational opportunities.

### **U.S. Department of Defense**

The Department of Defense, established in 1949, includes the Department of the Army, the Department of the Navy, and the Department of the Air Force. Each of these military services is involved in providing outdoor recreational opportunities in North Carolina.

### **U.S. Department of the Army, Corps of Engineers**

Along with its primary responsibility for navigation, flood control, beach erosion control and river basin studies, the Corps of Engineers has devoted considerable attention to the establishment of recreational facilities. It is the policy of the Corps to plan for and provide outdoor recreational resources and facilities at all of its water resources projects. The Corps' general authority for recreational development stems from the Flood Control Act of 1944, which was later expanded by the Federal Water Project Recreation Act of 1965 (16 United States Code 460). The latter act directs that full consideration be given in each project to opportunities for outdoor recreation and fish and wildlife enhancement, and it established outdoor recreation and preservation of wildlife and fish as a full project purpose.

In North Carolina, the corps has developed four water resource projects that have recreational facilities: John H. Kerr Reservoir; B. Everett Jordan Reservoir; Falls Lake; and W. Kerr Scott Reservoir. Resources and facilities are available at these areas for a wide variety of activities, including freshwater swimming, boating, fishing, camping, field sports, picnicking, hiking and hunting. The corps leases many of these areas and facilities to the N.C. Division of Parks and Recreation and the Wildlife Resources Commission for management. The corps also operates recreational facilities – boat launching and picnicking – at the three locks and dams on the Cape Fear River.

In addition to its public works development programs, the corps participates with the state and other public bodies in making recreational opportunities available adjacent to corps projects. This participation takes the form of cost-sharing, assistance in planning and design, and the direct development of facilities.

### Military Installations

The Department of Defense provides land at North Carolina military installations for recreational purposes. Although public outdoor recreation is not a major function of the Department of Defense, its contributions in this regard are, nevertheless, important to North Carolina's overall outdoor recreation program. Generally, all military installations offer some degree of outdoor recreation programs for military personnel, their dependents and their guests. Access to their resources for recreational use by the general public, however, is usually limited. But departmental policy provides that when a military installation's mission does allow public access, formal agreements may be reached with appropriate state or local agencies to provide opportunities for a wide variety of outdoor recreational activities.

### **U.S. Department of Housing and Urban Development**

The Department of Housing and Urban Development (HUD) administers two programs that, in the past, have had an impact upon outdoor recreation in urban areas. Since 1981, however, funding for these programs has been reduced substantially.

#### Community Development Block Grants Program

HUD provides Community Development Block Grant funds to local governments through its Entitled Grant Program and Small Cities Program. These programs were established as a result of Title I of the Housing and Community Development Act of 1974, as amended through the Housing and Community Development Amendments of 1981 (42 United States Code 5301). The Entitled Grants Program serves entitlement communities (municipalities of 50,000 or more, urban counties of 200,000 or more and central cities under 50,000 located in Metropolitan Statistical Areas). The Small Cities Program serves non-entitlement municipalities and counties. Both programs authorize a 100 percent level of funding to public agencies for the preservation or provision of urban open space lands that have park, recreational or historical value. In addition, the programs provide for the acquisition, construction, reconstruction or installation of parks, playgrounds and recreational facilities where assistance for such facilities is unavailable from other federal programs.

### **U.S. Department of Transportation**

The U.S. Department of Transportation, established in 1968, includes the Federal Highway Administration. This agency administers the Federal Aid Highway Program, which provides grants to states and local governments for use in developing bicycle and pedestrian facilities.

### Federal Aid Highway Program

This program was established by Title 23 United States Code, as revised by the Surface Transportation Assistance Acts and various other amendments. The program provides annual discretionary grants to qualifying governments for use in the acquisition of rights-of-way and the planning, construction, improvement and rehabilitation of interstate, primary, secondary and urban roads and highways. Funds may be used for capital improvements such as bicycle and pedestrian facilities within highway rights-of-way.

### **National Oceanic and Atmospheric Administration**

The National Oceanic and Atmospheric Administration supports public and private programs affecting outdoor recreation in North Carolina's coastal areas. The Office of Ocean and Coastal Resources Management is responsible for providing federal leadership in the management of the nation's coastal and marine resources. This is accomplished by providing management, research and technical assistance to federal, state and local governments and the private sector through the agency's Coastal Zone Management Program and National Marine Sanctuaries and Estuarine Research Reserves Program.

### Coastal Zone Management Program

The Federal Coastal Zone Management Act of 1972 (16 United States Code 1451), as amended, provides for grants-in-aid to coastal states with federally approved coastal zone management programs.

### National Marine Sanctuaries and Estuarine Research Reserves Program

This program provides financial assistance to eligible public and private entities for the acquisition, development and administration of land and water resources within areas designated by the secretary of Commerce as marine sanctuaries or estuarine research reserves. These areas are set aside as laboratories for educational, recreational and research purposes. The program also makes financial assistance available to universities and private organizations for independent research projects, such as the study of water quality, water current modeling and the impacts of mosquito spraying and similar activities on aquatic life in sanctuaries and reserves. In North Carolina there are four such reserves that protect habitat for hundreds of species of fish, birds and other wildlife and provide environmental education opportunities. The reserves are administered by the Division of Coastal Management, N.C. Department of Environment and Natural Resources.



## LOCAL AGENCIES AND PROGRAMS

### County Roles and Responsibilities

North Carolina has 100 counties, varying in character from the densely populated metropolitan counties such as Mecklenburg and Wake, to sparsely populated rural counties such as Jones and Gates. The counties have varying outdoor recreational needs that have prompted the establishment of different recreational programs.

Seventy-eight of North Carolina's counties have established recreational programs with parks, facilities and program activities. The larger land area of counties, as compared to municipalities, provides for a wider range of resources and makes available a greater variety of outdoor recreation possibilities. As a result, a county outdoor recreational program may offer a combination of resource-based and user-oriented activities to the public. Beaches, swimming sites, boat access sites, picnic areas, scenic areas and occasionally campgrounds are among the types of resource-based areas and facilities provided through county programs. Counties often provide facilities such as playgrounds, sports fields, tennis courts and other active outdoor recreation facilities as well.



Counties generally provide the resource-based and locally oriented outdoor recreational areas that are not large enough to be managed feasibly at the state or federal levels, or which do not have resources of statewide or national significance. Such areas constitute an invaluable part of the overall outdoor recreational effort in North Carolina and are indispensable to well-balanced statewide outdoor recreation.

Twenty-two of North Carolina's counties do not have officially established outdoor recreational programs. For these jurisdictions, provision of resource-based activities is often limited to



maintenance of picnic areas or boat ramps. User-oriented facilities are normally available only at public schools, municipal parks, state parks and federal areas. Three counties have no county or municipal recreation department: Hyde, Montgomery and Tyrrell.

### **Municipal Roles and Responsibilities**

One hundred and fifty municipalities have recreational programs and facilities of some type, with trained staff involved in the administration of parks, facilities and activities. These programs and facilities vary greatly, depending mainly on the population of the municipality. Generally, smaller towns have more limited facilities. Smaller towns are more likely to rely on counties, local school systems or private organizations and groups to administer recreational activities.

Because of population densities and the lack of large open-space areas, most municipal recreation systems tend to concentrate their efforts on providing services involving more intensive user-oriented facilities that require relatively little space in proportion to the use accommodated. Typical municipal outdoor recreational facilities include playgrounds, swimming pools, ball fields, tennis courts and picnic areas. A few municipalities even provide golf courses.



Because municipal programs typically provide recreational facilities and programs in urban areas, they have only a limited bearing on statewide natural resource-based outdoor recreation. There are some exceptions, however, especially in the cases of parks located on bodies of water or coastal municipalities that provide public beach access.

Although most municipal programs do not typically provide resource-based outdoor recreational facilities, municipalities do play a vital role in providing facility-dependent recreational opportunities in North Carolina. The role of municipal programs will likely grow in importance as increased public emphasis is placed on recreation closer to home. Since municipal recreation agencies are closest to the populace, they are usually the first to feel the pressures to establish programs that meet the demands of residents. Consequently, municipalities are taking a lead role in educating citizens about active lifestyles as well as providing services that promote healthful living. As statistics about increasing obesity become available, these services are becoming more important.



A more recent trend is a greater emphasis on planning for and providing open space opportunities. This is particularly true for North Carolina's larger cities that are experiencing rapid population growth. Providing open space corridors affords a wide range of benefits including trail-related recreation, alternative transportation, improved water and air quality, and wildlife habitat. As more people become interested in the environment and in outdoor recreation in natural settings, municipal departments are providing opportunities to learn the skills to maximize outdoor experiences.

## **PRIVATE AGENCIES / PROGRAMS**

In addition to publicly provided outdoor recreation, wide arrays of recreational opportunities are offered by the private sector. Many private agencies whose primary mission is not land management use recreation to achieve their objectives or create recreational opportunities as a consequence of their activities. In addition, many other recreational opportunities are provided by diverse sources such as churches, businesses and private swimming, tennis, fitness and country clubs.

### **Young Men's Christian Association (YMCA)**

The YMCA, founded in the United States in 1844, has as its mission to put Christian principles into practice through programs that build healthy body, mind and spirit for all. Although each YMCA is associated with the national organization, programs, staffing and style of operation are set locally, run by volunteer boards. YMCA services are tailored to the community in this way. For example, the YMCA has a campus operation at Guilford College in Greensboro. Programs vary from those for older adults to pre-school ages. More than sixty YMCAs are located in North Carolina to serve members and program participants.

### **Young Women's Christian Association (YWCA)**

The YWCA has eight clubs in North Carolina. The organization's focus in the community is to provide programs and services to women, girls and their families by offering a wide range of services and programs that enrich and transform lives. YWCAs assist with programs and information that deal with a variety of critical issues including child and youth development, and health and fitness.

### **Boys Clubs and Boys and Girls Clubs**

The 111 North Carolina Boys Clubs and Boys and Girls Clubs are nonprofit corporations that serve youngsters, age 6 to 18, with after-school, weekend and evening activities and programs. Nationwide, over half the young people in these clubs are from minority families, families with low annual incomes and families with four or more children. Volunteers, career professionals and staff attempt to build the self-esteem and motivation of participating youngsters through club health programs, physical education and environmental education programs, all of which incorporate outdoor recreational activities.

### **Boy Scouts and Girl Scouts of America**

The Boy Scouts and Girl Scouts each have councils in North Carolina. Camping, environmental education, swimming and canoeing are emphasized by both scout groups. Most of these activities are centered in primitive to semi-developed camps either leased or owned by the councils. Outdoor activities are offered throughout the year.

## **4-H Clubs**

4-H, a program of the NC Cooperative Extension Service, is jointly funded by the federal, state and county governments. Its mission is to provide youth and adults with opportunities to develop decision-making, problem-solving and leadership skills through experience. In all 100 counties, each 4-H program is determined by a local advisory board. Although it was once considered a program for agricultural communities, urban counties such as Wake and Guilford have strong 4-H programs.

Outdoor education emphasizes natural resource conservation. Youngsters participate in outdoor recreational activities in the community, including camping. The North Carolina organization operates three camps, operated on the traditional summer camp model. The Betsy-Jeff Penn Camp also functions as an outdoor education center during the school year. Children in the third through eight grades have the option of staying onsite two or four nights. The environmental education program includes studies on weather, ecology, wildlife and outdoor activities such as orienteering.

## **COMMERCIAL PROVIDERS**

Commercial providers of outdoor recreation satisfy significant public needs in North Carolina. Commercial firms can finance projects requiring large capital investments and react more quickly to changes in public demands. Specialized needs of relatively small groups of participants can also be addressed by commercial recreation providers. Although commercial providers are distributed across North Carolina, they are concentrated around vacation destinations.

Whitewater rafting outfitters in Western North Carolina serve thousands of floaters each year. On the Nantahala River alone, approximately 200,000 people floated down the river each year. Outfitters also operate on several other popular whitewater rivers such as the Nolichucky, French Broad and Tuskasegee rivers.

Another major recreation industry in Western North Carolina is snow skiing. Six major ski areas are located in the Western part of the state. While total annual participation varies considerably depending on snowfall, nearly 700,000 skiers participated in 2010. Golf is another activity that is provided primarily by the commercial sector. In North Carolina, there are over 600 golf courses in 2014. Many are private and daily fee courses.

Most of North Carolina's campgrounds are privately owned. More than 300 are dispersed throughout the state, offering over 15,000 campsites. This represents the vast majority of the 19,000 or so public and private campsites in North Carolina.

Private, for-profit recreational enterprises offer a variety of other outdoor opportunities in North Carolina. Such enterprises include driving ranges and mini-golf, water parks, amusement parks, batting cages, paint ball facilities, summer camps, private zoos, gem mining, scenic railroads, cruises, deep sea fishing, bus tours, professional baseball and nature tours. Because of its size, complexity and changing nature, however, private outdoor recreation is extremely difficult to inventory in a comprehensive manner.



## Chapter 5

### Trails in North Carolina

North Carolina is blessed with some of the most significant, unique and scenic natural resources in the nation. From the splendor of the Blue Ridge Mountains to the rolling Piedmont to the scenic barrier islands on the Atlantic, the state has an abundance of natural treasures traversed by rivers and streams well-suited for the establishment of trails for the enjoyment of North Carolinians and its millions of visitors annually.

Many people use the terms trail and greenway interchangeably. Greenway systems provide sufficiently robust corridors of connected and continuous open space managed for conservation and recreation purposes. In many cases the width of a greenway is determined by available public land or easements, but ideally it should be informed by environmental and ecological systems-function criteria. They may follow natural land or water features, and may link nature preserves, parks, schools, businesses, neighborhoods, cultural features and historic sites. Trails are more narrow designated corridors, usually within parks, but also including abandoned railroad corridors, utility easements and or water features that provide recreational, aesthetic, alternate transportation or educational opportunities to both motorized and non-motorized users.



Trails on land and water throughout the state contribute to the overall quality of life and health of users by offering people attractive, safe, and accessible places to exercise, be outdoors and be part of a community. According to the National Association of State Park Directors, visitors view trails as one of the most important facilities in a state park. In terms of dollars spent on

public recreation in North Carolina, the development of trails has enjoyed a huge increase over the past decade. During the past five years, about a third of all of the state's Parks and Recreation Trust Fund matching grants to local governments have included funds for trail development or renovation.

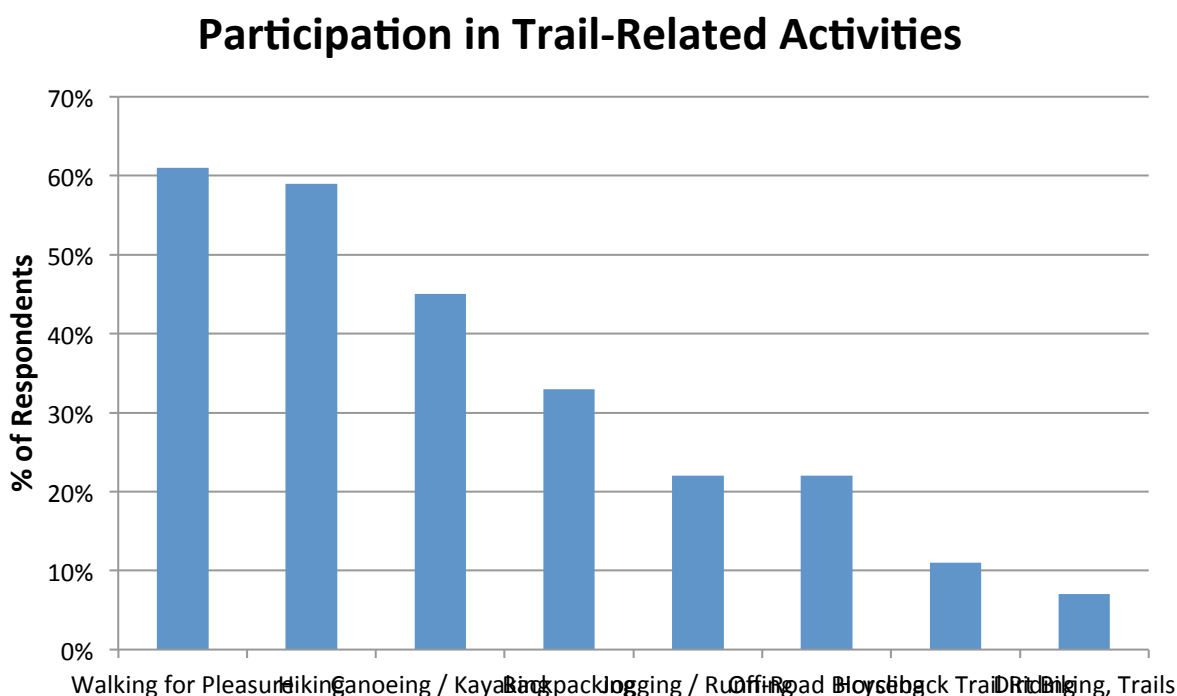
The trails in North Carolina include national (such as the Appalachian Trail), state (such as the Mountains to Sea State Trail), regional (such as the Carolina Thread Trail) and local trails (such as the trail system at Charlotte's Reedy Creek Nature Preserve). These trails occur on public and private property, and are developed and maintained by both the public and private sectors. Trails may be paved, unpaved or water-based, and accommodate a variety of ages and users, including walkers, hikers, backpackers, joggers, bicyclists, mountain bikers, in-line skaters, horseback riders, paddlers, ATV/off-road vehicles, wheelchairs and other motorized devices for persons with disabilities.



As noted by the President's Commission of Americans Outdoors in 1986, "Trails and greenways have the potential to be this country's most important land-based initiative for conservation and recreation in the next several decades." This statement holds true in North Carolina as evidenced by the multitude of local, regional and statewide trails that have been developed in the last decade and/or are proposed for the near future.



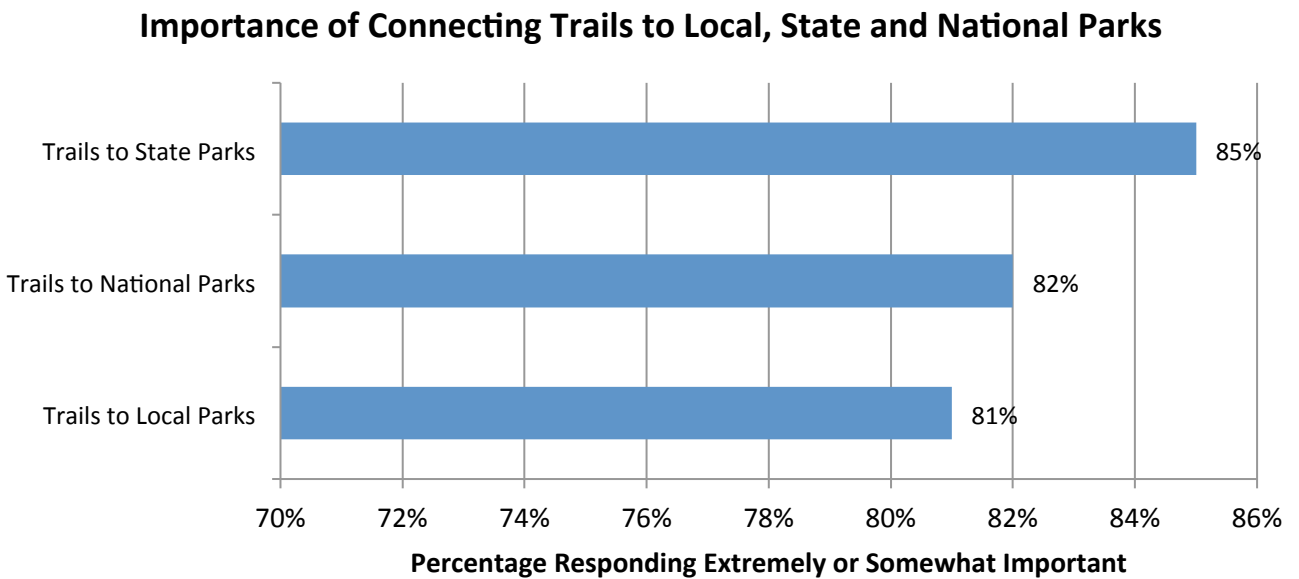
Trails are positioned and well-suited to meet some of the most popular outdoor recreation activities and needs identified by North Carolinians. The 2014 public survey conducted for the North Carolina Outdoor Recreation Plan found eight trail-related activities were ranked in the top 35 outdoor recreation activities by respondents (Figure 5.1).



**Figure 5.1 Participation in Trail Activities**

Eighty-one percent (81%) of respondents found it was important for “local park/site” trails to connect to outdoor recreation opportunities; eighty-five percent (85%) for “state park/site” trails to connect and eighty-two percent (82%) for “federal park/site” trails to connect (Figure 5.2). Also, the public survey found forty-nine percent (49%) of respondents felt “providing local, regional and statewide trails” should be a top priority for outdoor recreation providers in the state.

The recreation provider’s survey conducted for the 2014 North Carolina Outdoor Recreation Plan found that fifty-three percent (53%) of local, state and federal providers found it difficult to meet the needs for off-street walking and biking paths. Also, 67 percent of recreation providers responded that it is important for trail linkages within their park system and 57% said that it’s important to link trails to other jurisdictions. The recreation providers listed the following trail-related facilities as most urgently needed in their park or park system: paved trails (31%), unpaved trails (29%), nature/interpretive trails (20%), and mountain bike trails (18%).



**Figure 5.2 Importance of connecting trails to local, state and federal parks.**

## Benefits

Trails provide multiple benefits for individuals and communities that can positively affect the sustainability of local, regional and the state's economic, environmental and social health. These benefits are measurable and definable. The degree to which a particular type of benefit is realized depends largely upon the nature of the greenway or trail system being built and how accessible and well maintained it is. These benefits include:

- Alternative modes of transportation – trails offer an alternative mode of transportation for work, errands and recreation rather than using an automobile. Trails reduce road congestion and are less expensive to construct than roadways, allow residents to travel by bicycle or foot, save money on gas, car maintenance, and parking fees. Also, trails help reduce the emission of greenhouses gases along with the number of vehicle-bicyclist and vehicle-pedestrian related accidents. Studies have found that for every 1 mile pedaled rather than driven, emissions of carbon dioxide are reduced by nearly 1 pound. (Rails to Trails Conservancy (2005)



- Economic Impacts – Trails can create job opportunities in construction and repair and recreation business opportunities through rentals and sales (such as kayaks, canoes and bicycles) and recreation services (guided land and water tours). Trails also tend to increase proximate property values, increase local tax revenues, and attract tourists and tourist spending in the local economy. For example, the Shepard's Vineyard housing development in Apex added \$5,000 to the price of 40 new homes adjacent to the regional trail and these homes were still the first to sell. (Chuck Flink, 2014)



National studies demonstrate many companies seeking to relocate or establish a corporate headquarters have cited the availability of trails as a significant factor in their decision to choose one locale over another. In Morganton, the Catawba River Greenway was cited as an amenity that led to the town's designation as one of the 50 best small towns in the Southeast. It was also a factor in Caterpillar Corporation's choice of Morganton as the site for a new facility. (The News Herald, Morganton, 2014)

- Improving health and fitness – Trail systems contribute to the overall health of users by offering people attractive, safe, accessible places to exercise, and possibly to enjoy water-based trails. Trails can help reduce physical and mental health risks by providing pleasant places to exercise. This helps control weight, blood pressure and cholesterol levels, build strength and endurance, and helps prevent depression. (US Center for Disease Control, Physical Activity and Health, 2005)



The American Heart Association found for every \$1 spent on biking and walking trails, approximately \$3 in medical expenses can be saved. Recent studies found that two-thirds (66%) of adults and one-third (33%) of children living in NC are obese or overweight. In addition, the President's Council on Fitness and Sports noted, "Parks with

paved trails were almost 27 times more likely to be used for physical activity than parks without trails.” The Outdoor Foundation’s 2013 Outdoor Participation Report found running, including jogging and trail running, is the most popular activity among Americans when measured by number of participants and by number of total annual outings.

- Environmental protection – Trail corridors provide a multitude of environmental benefits which help protect the essential functions performed by natural ecosystems (clean air, clean water and wildlife protection) across the state. Trail corridors protect important habitats and provide green corridors for people and wildlife. Trail corridors help improve air and water quality. By protecting land along rivers, streams and lakes, trail corridors prevent soil erosion and filter pollution caused by agricultural use and urban/road runoff. Trail corridors serve as natural floodplains and encourage water table recharge.



According to the Federal Emergency Management Agency, flooding causes over \$ 1 billion in property damages every year. By restoring floodplains that are developed to their natural state, many riverside communities are preventing potential flood damage. Trail corridors help to preserve habitats for many plants, insects and animals that are important and maybe unique to the region.

- Connecting communities – The great appeal of trails lies in the concept of connectivity. Trails multiply the benefits of conservation areas, parks and open spaces by linking them together. Trails often serve as walking and bicycling routes to work, school, local businesses, restaurants, parks and recreation areas. They can be used to conserve historic and cultural resources such as archaeological and historic sites. Trails provide places for visitors and residents to exercise and experience the many natural and cultural wonders of North Carolina.

Many sources cite trails as “America’s New Main Street” where neighbors meet, children play and community groups connect and celebrate. Trails can provide a sense of place and community pride for an area or region. According to national surveys by the Federal Highway Administration, Americans are willing to walk as far as 2 miles to a destination, and bike as far as 5 miles. (Rails to Trails Conservancy, 2008) Trail systems can also connect to other municipal/county trails and parks and with major regional and/or statewide trails.

- Environment education –Richard Louv’s 2005 book, “Last Child in the Woods” notes that the majority of this generation’s children have “nature deficit disorder”. They have missed the chance to interact and bond with nature and the next generation of adults may neither know nor care about such things as the environment, biodiversity or sustainability. Louv cites extensive research showing that unstructured play in nature is essential for a child’s healthy physical and emotional development.





Trails can offer a safe place for our children to play outside with others from the community and create awareness of each other, as well as the natural and cultural world. They offer close- to-home environmental education opportunities for both children and adults to learn about native plants and animals, while rediscovering North Carolina's ecosystems and ecological processes. Trails provide excellent areas for hands-on school field trips.



Some trail related issues facing North Carolina over the next 10 years include:

- Meeting the needs of a growing population by providing more trails and improving access and connectivity to existing trails.
- Improving the attractiveness and usefulness of trails by developing better trail signs and directions, locating trails where people live, increased ADA accessibility, and better trail maintenance.
- As trail use increases, conflict between users groups will increase. All levels of recreation providers will need to open channels for better communication and coordination while trying to address safety and liability issues through improved management and enforcement and reduce trail user conflicts.
- Increased development pressure from the state's increasing population will reduce the availability of lands for trails.

- Improving trail safety through better site planning, design, maintenance, rules and regulations, lighting, signage, safety programs, law enforcement and patrol and community watch programs.

## Chapter 6

### Goal, Issues, Objectives and Actions

The process for developing the 2015 North Carolina Outdoor Recreation Plan included public input via a large scale survey, an inventory of park lands and recreational facilities, numerous presentations to interested parties and analysis of issues related to outdoor recreation and natural resource conservation in the state. The culmination of the planning process is an action plan for the next five to ten years that will address the goal, issues and objectives that have been identified.

**GOAL STATEMENT:** *To meet the outdoor recreation needs of a growing population, to manage and protect North Carolina's natural resources for current and future citizens, and to achieve the related health and economic benefits for local communities and the state.*

#### **Issue: Growing Population**

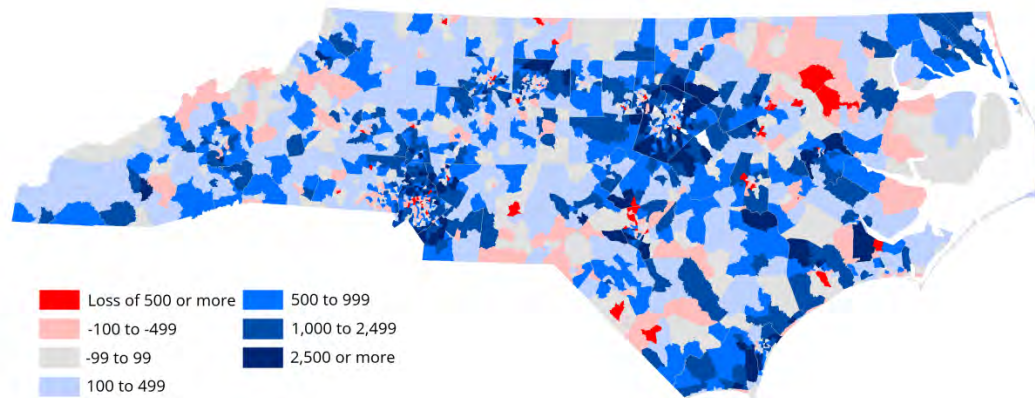
**Objective #1:** *Meet the needs of North Carolina's rapidly growing population by maintaining and enhancing its outdoor recreation resources*

From the majestic Blue Ridge Mountains to the crystal shores of the Outer Banks, North Carolina has at its fingertips, a wealth of outdoor recreation resources for its citizens to enjoy. Maintaining and enhancing these resources must be carefully studied and addressed as North Carolina's population continues to grow rapidly. North Carolina has been, and continues to be, among the fastest growing states in terms of population, in the US. Between 1990 and 2010 the state added 2.9 million new residents, growing by 44 percent.

According to the U.S. Census Bureau, North Carolina's population grew at an annual rate of 1.7 percent between 2000 and 2010, far exceeding the nation's rate of 1.0 percent. Furthermore, migration accounted for 80% of North Carolina's growth during this time and the Census Bureau estimated that between 2010 and 2015, the number of people born outside of North Carolina could surpass the number of native North Carolinians living in the state. Although only the 28<sup>th</sup> largest state in terms of size, it is the 14<sup>th</sup> fastest growing state since 2010. In addition, North Carolina is currently the 10<sup>th</sup> most populace state and is projected to move into the 7<sup>th</sup> spot by the year 2030.

Ongoing effective natural resource management is critical due to the multitude of challenges caused by such rapid growth. Without proactive management of the state's parks and natural areas, the integrity of these unique spaces may be diminished and over time may be lost.

## Total Population Change by NC Census Tract, 2000 to 2010



Data: 2000 and 2010 Census Summary File 1. 2000 Census tracts normalized to 2010 tract boundaries by Carolina Demography.

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This process should also include seeking creative means to take advantage of and highlight the value that parks and recreation services bring to protecting important natural resources, which in turn provides for a healthier populace and economy.

An additional factor to consider is the realization that many state and local parks that were funded by LWCF decades ago are aging. They either need renovating or totally repurposing to better serve the current needs of the citizens. Aging parks and recreation facilities may have totally outlived their intended usefulness by being in disrepair or obsolete. These areas, once considered jewels of the community, may benefit from rehabilitation and/or repurposing and may very well be diamonds in the rough, waiting to shine again.

For this initiative to be successful, park managers at all levels must continue to place importance on the critical need of protecting and growing North Carolina's natural and outdoor resources. This includes state parks, recreation areas, state forests, wildlife areas, lakes and rivers, as well as local and regional parks and recreation systems, land conservancies, non-profits, etc. Increased cooperation and collaboration will be vital in ensuring that North Carolina's outdoor recreation resources continue to serve and exist for its citizens in the changing times ahead.

### ***Initiatives***

- 1. Continue to plan for the maintaining and enhancing existing outdoor recreation resources.*
- 2. Promote public-private partnerships as well as increase collaboration between local governments, non-profits and volunteer groups to expand outdoor recreation resources.*

3. *Continue to support funding of the NC Parks and Recreation Trust Fund (PARTF), the reauthorization of stateside LWCF and the federal Recreational Trails Program and Transportation Alternatives Program to assist with new outdoor recreation resources in North Carolina.*
4. *Better educate citizens about the current and future outdoor recreation resource needs for a growing population.*
5. *Reduce the backlog of outdoor recreation areas and facilities in the state in need of major renovation, rehabilitation and/or repurposing.*
6. *Continue to design recreational facilities to ensure universal access with recognition of the needs of under-served and aging populations.*



### **Example: TRIAD PARK**

Triad Park is a joint venture between Forsyth and Guilford Counties. A total of 426 acres have been bought and preserved by the counties for a regional centerpiece park which has nature based park facilities nestled in the woods and meadows of these two Piedmont counties. The cooperation between the two counties is a pro-active initiative to better serve the growing population of the two counties.

The partnership between the counties is unique in that each county contributed matching dollars for a common goal of acquiring, developing, and operating the new park. “Triadism”, a regional initiative, is a successful reality with Triad Park, the flagship of cooperation and dedication showing the best of what communities can do when they work together for the common good and welfare of their citizens.

## ***Issue: Public Health***

### ***Objective #2: Support improvements in public health and fitness by increasing opportunities for physical activity***

Researchers continue to provide scientific evidence about the health benefits of exercising outdoors by participating in outdoor recreation. Benefits include enhanced physical, mental and emotional well-being. Parks, trails and other outdoor recreation facilities can provide convenient, safe, and attractive places for North Carolinians to be physically active outdoors. Participation in outdoor activities is associated with a number of important health factors including more active citizens, connecting communities and improving physical and mental health.

According to the U.S. Centers for Disease Control and Prevention, “physical activity is one of the most important steps that people of all ages can take to improve their health”. There are continuous reminders of the high costs associated with obesity and related lifestyle diseases including hypertension, kidney disease, heart disease, and liver disease – all on the rise for children, some as young as age 12. The Centers for Disease Control (CDC) reports that the percentage of obese youth has tripled from 1980 to 2011.



The N.C. State Center for Health Statistics found that more than two thirds of adults are overweight or obese as well as an estimated 30% of children ages 10 – 17. Nationwide, local, county, state, and federal governments are working to reduce childhood obesity and encourage children and families to be more physically active through initiatives like Safe Routes to Play and other recreation planning and infrastructure programs. The provision of outdoor open



spaces and recreational space has been identified as a key to addressing these issues. Making parks accessible to all citizens will continue to be important.

The Outdoor Foundation's 2013 Outdoor Recreation Participation Report found 90 percent of adults who regularly recreate outdoors were introduced to outdoor activities between the ages of five and 18. This makes today's youth participation critical to encouraging similar patterns for future generations. Nearly 60 percent of children and young adults aged six through 24 participate in some type of outdoor recreation. However, the trend is toward reduced participation. In addition, the report found that minority populations participate less frequently, with only 21 percent participating. Increased "screen time" spent on television, video games and the internet have decreased time spent outdoors.

### ***Initiatives and Recommendations***

1. Provide more park land and recreational facilities to encourage children and their families to be more physically active.
2. Promote public and private partnerships, especially recreation providers, healthcare organizations, and insurance companies, to encourage physical activity through outdoor recreation.
3. Continue to seek efficiencies in providing more opportunities for outdoor recreation by leveraging projects with PARTF and LWCF assistance.
4. Provide communities up-to-date information about the role of accessible parks, open space, and non-motorized transportation routes in facilitating healthy residents.
5. Encourage the development of community policies, recreational facilities, schools, trails and bicycle-friendly routes to help people be more physically active.

**Example:** Two successful health and fitness programs are being conducted by the Mount Airy Parks and Recreation Department health and fitness programming in conjunction with the Surry County Health and Nutrition Center. The "Biggest Loser/Losing for Life" program is an adult offering that promotes long term diet and exercise modifications. The city also has the "Minus 15" program for children ages 11-15. This youth weight management program offers specialized exercise and nutritional support under the direction of a fitness specialist and classes by a Registered Dietician. Participants exercise weekly in the fitness center based on their goals, limitations and interests such as: fitness classes, weight training, sports activities, and a Fit-n-Fun Zone. Participants track height, weight, body fat, tape measurements, strength, cardiovascular fitness, and blood pressure.

## ***Issue: Access and Cooperation***

### ***Objective #3: Improve the visibility of and public access to public recreation areas and foster cooperation between public recreation managers***

According to the American Journal of Preventative Medicine, participation in outdoor recreation activities increases when people can safely and easily access well-maintained recreation facilities close to home. In addition, connecting parks and recreation facilities to each other, homes, schools, businesses and other local attractions by-way of trails can help ensure better access and increase usage of parks and their recreational facilities. The Outdoor Foundation's Barriers to the Outdoors report in 2010 found that the lack of transportation was one of the top barriers to greater participation in outdoor recreation activities.



The visibility of and public access to recreation areas in the state can be improved through increased cooperation between recreation providers in the state. Greater cooperation can provide efficiencies and help avoid duplication of services.

National and state parks, recreation areas, wildlife and forest areas provide large natural resource-oriented outdoor recreation areas in North Carolina. Closer to home, local parks and recreation systems, quasi-public, non-profit and private sector recreation providers all offer a broad range of recreational areas and opportunities across the state.

The North Carolina Outdoor Recreation Plan public and recreation provider's surveys demonstrate that the public wants a wider range of recreational opportunities in their communities and when they travel (see chapter 2). The public may not be aware of which

governmental or private entity provides the services as long as they are high quality, convenient and meet their needs. Recreation providers, working together, can provide an interconnected network of recreation spaces including land and water trails in the state.

### **Example:**

An excellent example of cooperation in North Carolina is the development of the state's premier cross-state trail, the Mountains-to-Sea State Trail (MST). The continuing development of this trail represents a creative partnership involving local governments, trail groups, land trusts, federal and state agencies, private landowners, volunteers, the non-profit Friends of the Mountains-to-Sea Trail (FMST) and North Carolina Division of Parks and Recreation. The trail is an official part of the state parks system, with segments of the trail managed by different agencies and local governments.



### ***Initiatives and Recommendations***

1. Provide state (PARTF) and federal (LWCF) grants to state parks and local governments to improve access to public recreation areas by increasing the number of sites, facilities, programs or opportunities for the public to use natural and recreational resources.
2. Expand the system of local, state and federal interconnected trails/greenways and access points through acquisition, development, renovation and expansion of corridors. LWCF and PARTF funding priorities in rank order will include:
  - a. State trails such as the Mountains-to-Sea, French Broad River, Yadkin River and Deep River state trails; as well as regional trail systems;
  - b. Establishment of local trails where none exist in the jurisdiction;

- c. Close to home trails that connect homes, work places, schools, open space and recreation areas;
  - d. Providing access to water-based areas and trails
- 3. Recognize and reward partnerships between units of government, private non-profit, business and volunteer sectors in grant funding decisions.
- 4. Improve communication and coordination with community planners, economic development agencies, transportation departments and all levels of public recreation providers to better connect land and opportunities and to promote the availability and benefits of these resources.

## ***Issue: Outdoor Recreation and the Economy***

***Objective #4: Promote the economic benefits of the state's recreation opportunities for communities across North Carolina***

State and local lands provide outdoor recreation opportunities in all 100 counties of North Carolina. Expenditures by people who visit parks and participate in outdoor recreation make an important contribution to state and local economies. The influx of recreation dollars comes from more than just tourist-related businesses, such as hotels, restaurants, and shopping centers. It also encompasses the economic growth that results from people visiting or moving to an area to take advantage of its recreational amenities and services. This has the potential to transform a community by attracting businesses, retirees, and families seeking a higher quality of life.

Tourist expenditures create a demand for goods and services, thus creating jobs and income for local residents. In more rural areas near larger public land holdings such as state parks and lakes, it is not uncommon for a good portion of the economic activity in these areas to be largely impacted by tourists and visitors to the area. Tourism is one of North Carolina's largest industries. According to a travel research group, TNS TravelsAmerica, domestic travelers spent \$20.2 billion in North Carolina in 2013, a 4% increase over 2012 and a record high visitor spending figure.





Nationally, according to the 2012 *Outdoor Industry Association Report*, Americans spend an average of \$646 billion on outdoor recreation – including gear, supplies, vehicles, trips, travel-related expenses and more. This type spending helps to create jobs, generates tax revenue, helps support communities and is a driving force of the economy. This holds true in North Carolina where according to the above mentioned report, 48% of North Carolinians participate in outdoor recreation each year, which generates:

- \$19.2 billion in consumer spending
- \$1.3 billion in state and local tax revenue
- 192,000 direct North Carolina jobs
- \$5.6 billion in wages and salaries

America's State Parks reveals that in 2009 there were approximately 725 million visits to 6,000 state parks across the United States, generating an economic impact of \$20 billion for the communities surrounding these parks. This is an excellent return on the investment of only \$2.5 billion, which was the nationwide annual budget expenditure for all of these state parks.



Property values are also impacted by the location of parks, open spaces, trails, etc. The Trust for Public Land conducted a study on the economic impact of the location of parks in relation to neighborhoods. They found that the value of residential properties immediately adjacent to parks increased property values as much as 20%. For other nearby properties, values could increase by 5% to 10%.



Preserving access to North Carolina's abundant outdoor recreation areas and venues, directly relates to protecting the economy, businesses, communities and people who depend on the ability to play outside and reap the benefits of outdoor recreation.

**Example:** The November, 2014 mid-term elections in North Carolina saw overwhelming public support for all the local parks and recreation bond referendums.

- Raleigh voters passed a \$ 92 million parks bond with 68% approval
- Winston-Salem voters passed a \$ 31 million parks bond with 69% approval
- Wake Forest voters passed a \$ 14 million parks bond with 65.6% approval
- Blowing Rock voters passed a \$ 1 million parks bond with 73% approval
- Hickory voters passed a \$ 25 million bond with 60% approval including funding for a riverwalk connecting a major riverfront park to a popular minor league baseball park as well as a greenway linking Lenoir-Rhyne University to downtown Hickory.



These bonds can serve as significant economic stimulators locally for community revitalization by creating local construction and supplier jobs and additional local spending for construction materials. Depending on the type of recreational area or facility being developed by the park bond, additional private recreation vendor businesses could be created.

### ***Initiatives and Recommendations***

- 1. Provide information about economic impact of state and local parks to increase appreciation for the value of parks to North Carolina's economy.*
- 2. Increase marketing efforts of local and state outdoor recreation opportunities to increase participation and gain support of natural and recreation resources, which in turn should enhance the economic impact.*
- 3. Develop and promote recreation programs, events, and facilities that attract regional travelers, to encourage overnight stays.*
- 4. Partner local organizations such as chambers of commerce, convention and visitor bureaus, and recreation related businesses to promote, support and help sponsor events, programs and facilities that bring outside dollars into the communities.*

## ***Issue: Conservation***

### ***Objective #5: Protect and conserve North Carolina's high quality natural resources and landscapes***

Mountains, forests, farms, rivers, streams, shorelines and other natural resources contribute to public health, economic stability, and quality of life in North Carolina. The state has seen rapid growth in recent years. With this growth, comes major residential and commercial development, which is changing the natural landscape.

North Carolina has made considerable progress in identifying the most important natural resources, landscapes, and watersheds for protection. Since 2005 over 388,000 acres of land across North Carolina have been protected from development through a variety of public and private actions. This has been made possible, in part, through the completion of local natural heritage inventories, farmland protection plans, and the development of the state's Conservation Planning Tool.

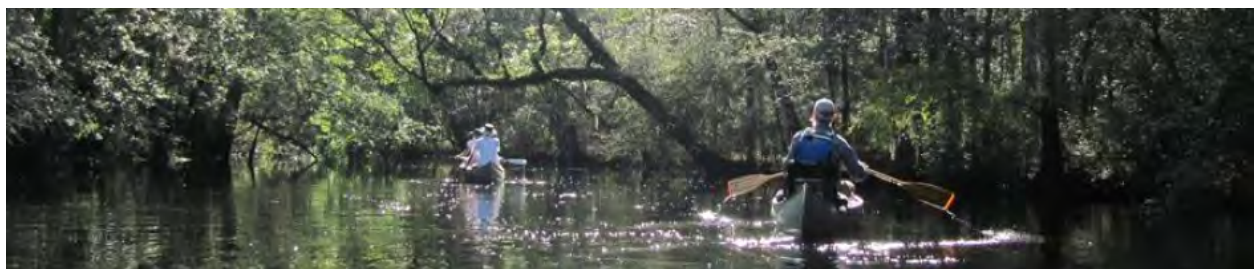
However, in recent years, land conservation and acquisition in North Carolina has slowed considerably. Between 2005 and 2008, an average of 75,160 acres of land was protected per year. Between 2009 and 2011, an average of only 29,580 acres of land was protected. To strengthen the commitment of protecting North Carolina's natural resources and landscapes, the state has three conservation trust funds to invest in infrastructure that supports economic development in North Carolina, as well as working to preserve the state's unique natural resources.



These three conservation trust funds and their objectives which have been established by the state of North Carolina are:

- *The Clean Water Management Trust Fund (CWMTF)*: Created in 1996, the CWMTF has been a primary source of grant funds for local governments, state agencies, and conservation non-profits to improve water quality through riparian buffers and other water quality projects, provide buffers around military bases, acquire land that represents the ecological diversity as well as historic properties.
- *The Parks and Recreation Trust Fund (PARTF)*: Created in 1994, PARTF is North Carolina's principal funding source for state parks as well as for local parks and recreation projects. Legislation authorizes 65 percent of trust fund revenue for state park projects, 30 percent for local matching grants and five percent for beach access.
- *The Agricultural Development and Farmland Preservation Trust Fund (ADFPTF)*: Founded in 1986, the ADFPTF supports public and private enterprise programs that promote sustainable agricultural, horticultural and forestland activities. It also funds conservation easements, which help keep land in production of food, fiber, and other agricultural products.

In addition, the Environmental Enhancement Grant Program awards grants under an agreement with Smithfield Foods to provide \$50 million over 25 years to improve the environment. Projects supported by the grants have resulted in the the restoration or conservation of more than 20,700 acres of natural areas and wildlife habitat.

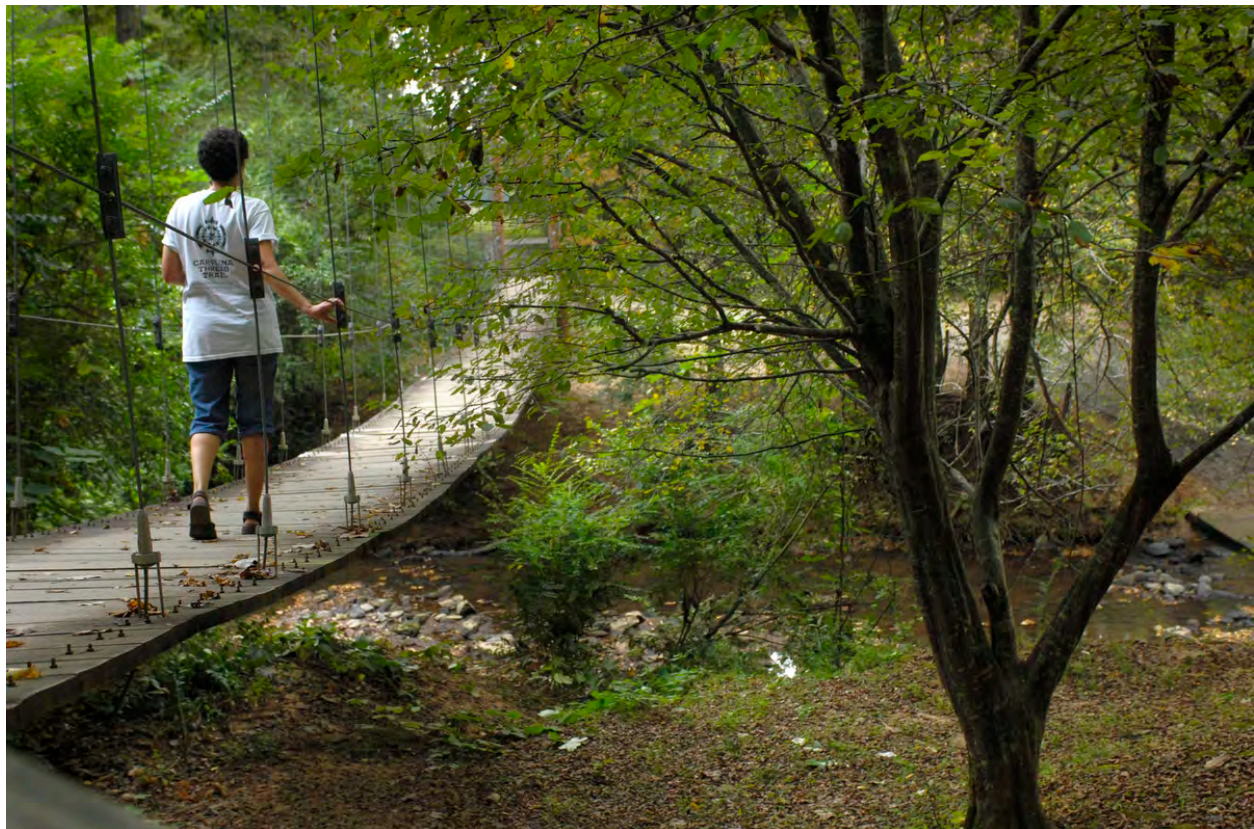


Land conservation should be viewed as an essential ingredient in the efforts to enhance North Carolina's economic prosperity, health, and quality of life. Local, state and federal government agencies can work more efficiently by working with private and nonprofit land trust organizations to protect and conserve important natural resources and landscapes. Balancing economic growth with conservation can help create a vibrant and prosperous future.



For example, most of the property The Nature Conservancy has protected has been transferred into public ownership so that everyone can benefit. In fact, the Conservancy has transferred more than 600,000 acres into public ownership – state and national forests, state parks, national wildlife refuges and state game lands. People play, hike, paddle, hunt and fish on public lands that were protected by The Nature Conservancy.

A recent study by The Trust for Public Land found that North Carolina's investment in conservation via these trust funds has returned four dollars for every one dollar spent. The value comes in the form of natural goods and services, such as cleaner drinking water sources, erosion control and flood mitigation. Additional economic benefits result from the impact that conservation has on jobs, agribusiness, parks and recreation, military bases, and tourism. Agriculture and defense are the two largest sectors of North Carolina's economy, with an annual impact of \$77 billion and \$26 billion, respectively.



**Example:** The Green Growth Toolbox is a technical assistance tool designed to provide communities, local governments, land use planners, planning boards and developers with data and recommendations for conservation of priority wildlife habitats that can be used in local land use planning, land use policy-making and development design. The Green Growth Toolbox includes a handbook, GIS dataset, and website, and local governments who want to use the



Green Growth Toolbox can sign up for daylong training workshops. The Green Growth Toolbox project includes data from the One NC Naturally Conservation Planning Tool, and is a cooperative, non-regulatory effort led by the Wildlife Diversity Program of the N.C. Wildlife Resources Commission.



### ***Initiatives and Recommendations***

- 1. Identify key state and local lands for acquisition in adopted regional and local open space and park plans. Encourage acquisition of important time-sensitive properties.*
- 2. Support state and local land use planning that bolsters conservation of important natural resources/landscapes and opportunities for outdoor recreation.*
- 3. Identify, encourage and enable land preservation around military installations, linking agriculture and defense to strengthen the state's economy and military readiness.*
- 4. Seek partnerships with federal, state, and local governments, as well as non-profits on coordinated goals for the continued protection, enhancement, and expansion of important natural resources and landscapes.*
- 5. Pursue land donations including easements, inheritance trusts, developer incentives, etc. to assist in acquiring and preserving important outdoor natural resources.*
- 6. Promote Green Infrastructure Practices and energy conservation in the planning, design, construction, and operation of outdoor recreation facilities.*
- 7. Continue to connect natural areas and ecosystems to improve biodiversity and wildlife management statewide.*

## ***Issue: Public Awareness***

### ***Objective #6: Increase public awareness of the state's natural resources and outdoor recreation opportunities through interpretation, education, and outreach***

Achieving this objective involves informing citizens of the vast natural resources and outdoor recreation opportunities in North Carolina to encourage a greater appreciation for these resources. This includes highlighting the value of parks in protecting important natural resources, while improving the health and economic well-being of North Carolinians. Increasing the opportunities for conservation education should be central to the effort because it encourages people to appreciate and conserve the state's natural resources.

A special emphasis should be placed on young people. As children are becoming more apt to choose indoor activities, such as gaming and tracking social media, it's challenging to find ways to reconnect them to nature. Studies show that environmental education and getting outdoors improves student achievement in core subjects such as science, math, and language arts and makes them more interested in learning overall (Ernst and Moore, Environmental Education Research 2004). In addition, getting kids outside and active promotes healthy lifestyles, which helps address childhood obesity, diabetes, attention deficit disorder, depression, stress and other physical and mental ailments that are becoming all too common with today's sedentary lifestyle (American Academy Of Pediatrics).



Likewise, when people use parks and other outdoor recreation resources, the environment is the beneficiary. Creating stronger connections between children and parks fosters current and future stewards who understand and appreciate nature.

Although social media is becoming more popular, an effective way to reach children and families is to place printed literature in the hands of school students. This should include information about local parks, the importance of outdoor recreation, and the associated mental and physical health benefits of outdoor recreation. Suggestions about inexpensive outdoor activities, such as walking, hiking and jogging, would be helpful because they are available to nearly anyone.



It is also important to continually explore effective ways to expose people to North Carolina's nature and wildlife resources. Increasing the public's appreciation for these natural treasures can also promote a greater interest in stewardship. In the end, if people enjoy outdoor recreation resources and activities, it should lead to improved stewardship and conservation of North Carolina's valuable natural resources for the enjoyment of future generations.

### ***Initiatives and Recommendations***

1. *Increase the use of environmental education and conservation curriculum in the state's K-12 school systems. Promote opportunities to take students outdoors to learn about the environment through visits to state and local parks.*
2. *Promote important natural resources, recreation events, programs and facilities.*



3. *Develop online educational materials and make them available for distribution at NC State Parks as well as local government parks and recreation agencies.*
4. *Develop and distribute printed materials in schools promoting outdoor recreation opportunities that can be sent home with students.*
5. *Improve public information about outdoor recreation opportunities as well as the value of protecting natural resources in the state.*

### **Example: Kids in Parks TRACK Trails Program**

*Kids in Parks* started in 2008 with a vision of improving the health of children and the health of parks by making existing trails more attractive and fun for novice users. At that time the Blue Ridge Parkway Foundation, National Park Service, and BCBS of North Carolina Foundation joined together to formally link the health of children to the health of parks by creating a strong network of trails and partners in the communities on and along the Blue Ridge Parkway.

The regional program was so successful that parks across the country rapidly embraced Kids in Parks TRACK Trails due to demonstrated effectiveness and ease of implementation. Today there are more than 80 TRACK Trails in seven states, comprising a national network of self-guided adventures- including hiking, disc golf, and geocaching – that inspire kids and families to be more physically active outdoors. Each TRACK Trail features self-guided brochures and signs designed to help families enjoy the outdoors experience.

One such successful TRACK Trails program in North Carolina is located in Smithfield, at Smithfield Community Park. The Smithfield Community Park TRACK Trail is an easy 1 mile loop around the perimeter of the entire park. This flat, paved trail around the 47-acre park features up close views and access to forest areas, creeks, and wetlands areas. For a longer adventure, the 3 mile Buffalo Creek Greenway can be accessed half-way around the loop.



*Smithfield Community Park – TRACK Trail*

## **Coordination with National Planning for Outdoor Recreation and Land Conservation**

The goals and objectives for the North Carolina Outdoor Recreation Plan are designed to not only meet the needs of residents and visitors, but also meet many national goals established by America's Great Outdoors (AGO), a 2011 initiative to develop a 21st Century conservation and recreation agenda.

AGO Goals to be met:

- 1) Increase and improve recreational access and opportunities on public lands;
- 2) Cultivate stewardship and appreciation of America's natural, cultural, and historic resources through innovative awareness initiatives and through education;
- 3) Build stewardship values and engage youth in conservation and recreation;
- 4) Invigorate the Land and Water Conservation Fund (LWCF) to better meet conservation and recreation needs;
- 5) Create and enhance a new generation of safe, clean, accessible great urban parks and community green spaces;
- 6) Advance national, regional, and community-supported efforts to preserve and enhance unique landscapes, natural areas, historic sites, and cultural areas while ensuring openness and transparency in any land designations; and
- 7) Empower communities to connect with America's great outdoors through their rivers and waterways

With the matching of statewide goals with AGO goals, North Carolina will be able to more efficiently use the state's LWCF apportionments over the next five years to create and promote outdoor recreation facilities and opportunities across the state.



## **Appendix A**

# **North Carolina Wetlands Summary**



## North Carolina Wetlands Summary

*“The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.”—Aldo Leopold*

### North Carolina Wetlands Overview

Wetlands are part of that community of which Leopold describes in which water plays a crucial role. A wetland is a geological formation that describes an area that is often wet but may not be wet all the time. According to a North Carolina State University publication, Protecting your wetlands, Wetlands are covered by shallow water part of year and have soils indicative of wet conditions and contain plants that are specially adapted to wet conditions. Wetlands are more than marshes and swamps and bogs. They are found in every county in North Carolina, with wetlands occurring from the coast to mountains, they can be found in wide flat areas, in depressions and between water and dry land such as along streams, rivers, lakes and estuaries. (NC State University Cooperative Extension Service. “Protecting Your Wetlands”)

### Wetlands of North Carolina

Type	Description	Plants associated
Salt/Brackish Marsh	Any salt marsh or Marsh subject to flooding either regular or occasionally by tides including wind tides.	Cordgrasses, salt and sea grasses, bulrush, sea lavender, needlerush and glasswort
Estuarine Shrub/Scrub	Any shrub dominated community subject to flooding either regular or occasionally by tides including wind tides.	Wax myrtle, eastern red cedar
Estuarine Forest	A forested wetland community subject to flooding either regular or occasionally by tides including wind tides.	Pine dominated with rushes
Maritime Forest	A forested community with its growth stunted due to the stresses of nearby salt spray from the ocean.	Live oak, red maple, swamp tupelo
Freshwater Marsh	Grassy areas flooded for extended periods during the growing season, included are marshes associated with lakes, managed impoundments, some Carolina Bays and non-tidal marshes.	Sedges, millets, arrowhead, pickerelweed, arrow arum smartweed, giant cane
Pocosin	Marshy shrub communities that typically occur in saturated, acid, nutrient poor, sandy or peaty soils; at some distance from large streams; and may be subject to periodic burning.	Evergreen shrubs

Type	Description	Plants associated
Bottomland Hardwood	Riverine forested or occasionally shrub communities in seasonally floodplains.	Oaks, sweet gums, green ash, river birch, cottonwoods
Swamp Forest	Very poorly drained riverine or non-riverine forested or occasionally shrubs communities that are semi-permanently flooded, including temporarily flooded depressional systems.	Cypress, black gum, water tupelo, green ash
Headwater Swamp	Wooded riverine systems along small streams. Soils are moist most of the year. Channels receive their water overland flow and rarely overflow their banks.	Hardwood dominated communities
Hardwood Flat	Poorly drained interstream flats not associated with rivers or estuaries; they are seasonally saturated by high water table or poor drainage.	Generally include Sweet gum and red maple
Pine Flat	Pine communities located in seasonally saturated soils that might become dry for part of the year. They generally occur in nearly flat areas not associated with a river or stream system,	Loblolly Pine

Wetlands serve an important function as biological filters that remove sediments and pollutants from surface waters. They also serve as a natural sponges reducing flooding by slowing discharging excess water back into streams or groundwater table. Wetlands are biologically rich and often contain a greater diversity of plants and animals that is found in drier habitats. They are excellent habitat for many kinds of waterfowl, shorebirds, and songbirds and are important as amphibian and fish spawning and rearing areas.

In addition, wetlands provide recreational opportunities more detail on recreational outlets will be discussed later in this appendix. Now suffice to say that a majority of Americans enjoy hiking, hunting, fishing, bird watching or photographing nature and wildlife. These activities would be greatly diminished if it were not for wetlands.

Historically, natural wetlands dominated floodplains and river deltas, and most level land in the coastal plain. From the time colonization began in of our state, North Carolina had 7.2 million acres of wetlands. Since that time, wetlands have been drained for agriculture, forestry, flood control, road construction and urban development. (US Department of Interior) Now about half of the remaining acreage that was once wetlands still exists. According to the most recent figures available, about 5.1 million acres of North Carolina –close to 17 percent of the state –is still wetland. The coastal plain contains 95 percent of the state’s wetlands. (US Geological Survey. National Water Summary on Wetland Resources)

## **Wetland Status and Trends**

*“Wetlands are important to our nation’s heritage, economy and wildlife –especially when it comes to coastal communities, when a study shows that area four times the size of Miami is disappearing every year, it underscores the importance of strengthening our collective efforts to improve wetland management, to reduce losses and to ensure costal infrastructure and resources are protected.”—Sally Jewell, U.S. Secretary of the Interior*

Most of North Carolina’s wetlands are located in coastal watersheds, it goes without saying that the loss of coastal wetlands that Secretary Jewell refers to also includes wetland loss in North Carolina. *Status and Trends of Wetlands in the Coastal Watersheds of the Conterminous United States 2004-2009*, a report produced by U.S. Department of the Interior, Fish and Wildlife Service and National Oceanic and Atmospheric Administration, National Marine Fisheries Service examined wetland losses on the Pacific, Atlantic and Gulf of Mexico coasts and along the Great Lakes. It determined that an estimated 80,000 acres of coastal wetlands are being lost on average each year, up from 60,000 acres lost a year during the previous study.

The report goes on to say, the Atlantic coast region experienced a net loss of wetlands between the years 2004-2009 at roughly about 112,000 acres. The report attributes much of the loss and degradation of wetlands in coastal watersheds to population pressures and conversion of wetlands to urban or silvicultural uses. This assault on wetlands is likely to continue as population continues to increase in coastal watersheds with an estimate that one quarter of the land area under the nation’s coastal watersheds will be developed by 2015 (Dahl 2013). This development will further degrade wetlands by changes in water flow, increased pollution and habitat fragmentation.

## **Wetland Types which should Receive Priority for Acquisition**

Criteria developed in the late 1980s and early 1990’s by U.S. Department of Interior under the National Wetland Conservation Plan are still relevant today. Broadly stated the plan’s criterion for developing priority system for acquiring wetland acreage should be based on three goals.

Consideration for acquisition of wetlands should be those wetland types that are:

- Rare or have declined rapidly within the state,
- Subject to loss or degradation by an identifiable threat, or
- Sites with diverse and important functions and values.

Under these broad goals of wetland protection, the Fish and Wildlife Service has provided more details to what types of wetlands should be acquired through the National Coastal Wetlands Conservation Grant Program FY 2015 grant guidelines. The guidelines give eleven attributes for which a wetland acquisition for conservation and protection should include. The table below lists these qualities.



### Criteria for Determining Priority for Acquisition of Wetlands

<b>Benefit</b>	<b>Acquisition Criteria</b>
<b>Wetlands conservation</b>	Will the acquisition reverse coastal wetland loss or habitat degradation in decreasing or stable coastal wetland types?
<b>Maritime forests on coastal barriers</b>	Will the acquisition significantly benefit maritime forests on coastal barriers?
<b>Long-term conservation</b>	Will the acquisition ensure long-term (at least 20 years) conservation of coastal wetland functions?
<b>Coastal watershed management</b>	Will the completed acquisition help accomplish the natural resource goals and objectives of one or more formal, ongoing coastal watershed management plan or effort?
<b>Conservation of threatened and endangered species</b>	Will the acquisition benefit any federally listed endangered or threatened species, species proposed for Federal listing, recently delisted species or designated or proposed critical habitat in coastal wetlands? Will it benefit State-listed species?
<b>Benefits to fish</b>	Will the acquisition provide, restore or enhance important fisheries habitat?
<b>Benefits to coastal-dependent or migratory birds</b>	Will the acquisition provide, restore, or enhance important habitat for coastal-dependent or migratory birds?
<b>Prevent or reduce contamination</b>	Will the acquisition prevent or reduce input of contaminants to the coastal wetlands and associated coastal waters that are already contaminated?
<b>Catalyst for future conservation</b>	Will the project leverage other ongoing coastal wetlands conservation efforts in an area or provide additional impetus for conservation?
<b>Partners in conservation</b>	Will the acquisition receive financial support, including in-kind match, from private, local or other Federal interests?
<b>Education/outreach program or wildlife-oriented recreation</b>	Is the project designed to increase environmental awareness and develop support for coastal wetlands conservation? Does it provide recreational opportunities that are consistent with the conservation goals of the site?

## **Tools to Manage Wetlands**

The North Carolina Wetland Conservation Plan is a strategy for the state to achieve no net loss and other wetland management goals by integrating both regulatory and non-regulatory approaches to protecting wetlands. North Carolina Division of Water Resources (NC DWR) with assistance for US EPA Wetland Program Development Grant crafted the plan. The plan addresses North Carolina's wetland program development plans for the next five years (2014-2018) and incorporate all four core elements of the Environmental Protection Agency's (EPA) Wetlands Program Framework (Monitoring and Assessment, Voluntary Restoration and Protection, Regulation, and Water Quality standards for wetlands). Below is a summary of the plan along with additional efforts going towards wetlands management.

### ***Monitoring and Assessment***

NC DWR wetland monitoring and assessment work in North Carolina has monitored wetlands for over nine years and has collected state wide wetland data at 184 sites from 2004-2013 of which could be categorized into ten types of wetlands. The data collected includes GIS/land use analysis, rapid assessments, water quality, soils, hydrology, and biological surveys of vegetation, amphibians, and macroinvertebrates.

NC DWR also worked with the state's in Lieu fee program, NC Ecosystem Enhancement Program (NC EEP), mitigation bankers and others involved in designing, developing and managing mitigation projects to gather data about wetlands. For compensatory mitigation projects, monitoring and assessment reports are submitted on an annual basis for a minimum of five to seven years. NC EEP utilizes a watershed-based planning process, while working with state and federal agencies, private companies and land trust to obtain the best possible return from their restoration, enhancement and protection projects. NC EEP has been monitoring the progress and success of its more than 580 projects aimed at conserving, restoring or enhancing around 30,000 acres of wetlands since the late 1990's. Also, North Carolina participated in the EPA's National Wetland Condition Assessment wetland survey in 2011 and is working collaboratively with South Carolina, Georgia and Alabama to apply a regional emphasis to wetland monitoring.

### ***Voluntary Restoration and Protection***

Voluntary restoration and protection can help maintain, increase and or improve the amount and function and or condition of the state's wetlands. Voluntary restoration and protection in North Carolina is encouraged and implemented on federal, state, local, and public-private partnership levels. At the federal level agencies like the United States Department of Agriculture (USDA), Fish and Wildlife Service (USFW), Army Corps of Engineers (USACE) work to provide opportunities for voluntary restoration and protection of wetlands. The USDA's Natural Resources Conservation Services (NRCS) Wetland Reserve Program is one such program. The program enrolls landowners to receive incentives for restoring, enhancing and protecting wetlands. Passed by Congress in 1989, the North American Wetlands Conservation Act (NAWCA) is an incentive-based, landowner-friendly program that fosters the development of public-private partnerships to protect North America's migratory bird habitat.

At the state level there are several state programs which provide opportunities for individuals or groups to aid in the state's goals of wetland restoration and protection. Some of the ways involve donation of land or placement of a parcel of land under and easement or contract, as with the Wildlife Resources Commission (WRC), Wildlife Conservation Program, Division of Coastal Management (DCM) the NC Conservation Tax credit Program, NC Division of Soil and Water Conservation and Clean Water Management Trust Fund. While other programs focus on focus on planning efforts. Two such efforts are Division of Coastal Management (DCM) Wetland Conservation Plan and WRC *Conservation Recommendations for Priority Terrestrial Wildlife Species and Habitats in North Carolina*.

The Division of Coastal Management identified the need for a wetlands conservation plan in 1992, when it found that the state could not determine the amount, type, location, and loss/gain trends of freshwater wetlands in the 20 coastal counties. To address these weaknesses, DCM developed a Wetlands Conservation Plan for the coastal area. The primary purpose of the plan is to provide detailed wetlands information to local, state, and federal governments, businesses, non-profit organizations and the public so they can make better resource management decisions.

The plan contains these major elements

- A wetlands inventory
- Functional assessment
- Wetland restoration
- Agency coordination
- Coastal area wetland policies
- Local land-use planning

*Conservation Recommendations for Priority Terrestrial Wildlife Species and Habitats in North Carolina* answers the question "How much habitat is enough for at-risk species in North Carolina?" This 2014 non-regulatory document's purpose is to present guidelines which will allow conservation, land use and land management decisions to take place while effectively protecting and enhancing the wildlife resources of the state. The document devotes a whole section to wetland habitats. Topics include planning and development recommendations for all wetlands habitats, demarking core terrestrial habitat zones, and managing adjacent landscapes. Also, attention is given to the proper care of specific wetlands such as ephemeral pools, and bog habitats.

Numerous advocacy groups such as The Nature Conservancy, North Carolina Coastal Federation, various land trusts, Ducks Unlimited etc. strive to protect and restore water resources throughout the state. Various groups are often able to obtain and or sometimes provide funding sources for conserving and protecting these important ecosystems. For example, recently, Ducks Unlimited a non-profit organization, dedicated to conserving North America's continually disappearing waterfowl habitats, announced in July 2014, that through

collaborative efforts with state and federal agencies, other non-profit organizations and private landowners more than 106,000 acres of vital wetland habitat has been conserved in North Carolina.

### **Regulations**

*“...No discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.” Section 404(b)(1) the Clean Water Act*

- Section 404 of the Clean Water Act:

In accordance with Section 404 of the Clean Water Act, the United States Army Corps of Engineers (USACE) is responsible for regulation the discharge of dredge or fill material into waters of the United States, including open waters, streams, and wetlands. The purpose of the Clean Water Act is to restore and maintain the physical, chemical, and biological integrity of the nation's waters. Under Section 10 of the Rivers and Harbors Act and this program USACE is responsible for receiving and evaluating permit applications affecting waters of the United States. Frequently, the required public interest review of applications results in a finding that the public must be compensated for unavoidable aquatic losses, including wetland resources.

- 401 Water Quality Certification Program:

NC Division of Water Resources of NC DENR currently administers a comprehensive wetlands regulatory program. Section 401 of the Clean Water Act stipulates that no Federal permit, including 404 permits will be issued unless a 401 Water Quality Certification has been issued or waived. 401 Certifications are required for any federally permitted or licensed activity that may result in a discharge to or filling of streams, wetlands, or open waters. DWR requires applicants to document measures taken to avoid and minimize impacts to these resources during design of the project and to perform compensatory mitigation and verify that a given project authorized by a federal permit will not contravene the state water quality standards.

- Coastal Zone Management Act:

North Carolina Division of Coastal Management (DCM) assesses coastal wetlands under North Carolina's Coastal Area Management Program in response to passage of the federal Coastal Zone Management Act of 1972 (CZMA). DCM works to protect, conserve and manage North Carolina's coastal resources through an integrated program of planning, education and research. As well as being subject to the 404 rules for development, development projects within one of North Carolina's twenty coastal counties must also acquire a Coastal Area Management Act (CAMA) permit.

- North Carolina Wetland Compensatory Mitigation:

Permitted impacts are projects that affect the nation's aquatic resources, which include rivers, and wetlands in North Carolina. Before property owners may proceed with work that may impact the function and quality of surface waters, a permit from the US Army Corps of Engineers (USACE) is often required to meet the requirements of the Clean Water Act or the

Rivers and Harbors Act. Through the regulatory program, the Corps of Engineers ensures that all associated adverse environmental impacts from work in waters or wetlands are avoided or minimized. In some cases, the Corps may require compensatory mitigation to offset losses of aquatic resource usually at a minimum of 1:1 ratio. Compensatory mitigation is the restoration, establishment, enhancement, or preservation of aquatic resources for the purpose of offsetting losses of aquatic resources resulting from activities authorized by Corps of Engineers' permits.

<b>Types of Compensatory Mitigation</b>	
Restoration	Returns natural or historic functions to a former or degraded aquatic environment
Establishment	Alters an upland site to develop an aquatic resource
Enhancement	Improves the functioning of an existing aquatic resource
Preservation	Protects and maintains an existing aquatic resource through real estate protections or other conservation actions

<b>Sources of Compensatory Mitigation</b>	
Mitigation bank	One or more sites where aquatic resources such as wetlands or streams are restored, established, enhanced and / or preserved for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources.
In-lieu fee program	A program that involves the compensatory mitigation of aquatic and related terrestrial resources through funds paid to a government or non-governmental natural resource management organization. In NC, the Ecosystem Enhancement Program (NC EEP) a state Department of Environment and Natural Resources (NC DENR) initiative offers four In-Lieu Fee mitigation programs designed to assist private and public entities comply with state and federal compensatory mitigation for streams, wetlands, riparian buffers, and nutrients.
Permittee-responsible mitigation	Individual projects constructed by permittees to provide compensatory mitigation for activities authorized by Corps of Engineers' permits

Wetland losses and gains through mitigation are tracked by three basic wetlands types with a fourth headwater wetland pending criteria development from NC Division of Water Resources. The three types are coastal, riparian, and non-riparian. Mitigation success criteria are also



based on those three basic types. The present criteria indicate a success rate of 70-90% for mitigation projects in Eastern North Carolina.

### ***Standards and Classification***

- **Water Quality Standards**

North Carolina's water quality standards for wetlands were implemented in 1996. The wetland standards contained in North Carolina Administrative Code 15A 02B.0231 and in 15A 02B.0201 are narrative in nature and were designed to protect through anti-degradation, preserve, restore and enhance the quality and use of wetlands and other waters of the state that are influenced by wetlands. Wetland uses protected in the rule include the following.

- Storm and flood water storage/retention,
- Hydrological functions such as groundwater discharge and ground water recharge,
- Filtration/storage of pollutants,
- Shoreline protection,
- Habitat for the propagation of wetland-dependent aquatic organisms and other wildlife.

These above uses are maintained and or enhanced through standards contain in the administrative code and provide NC DWR with the basic regulatory structure needed to protect wetlands from various detrimental activities outside of USACE jurisdiction such as ditching and draining. NC DWR has also utilized these standards to require some mining operations to maintain natural hydrology of surrounding wetlands that may be affected by groundwater pumping.

- **Wetland Classifications:**

In North Carolina all wetlands are classified as either freshwater wetlands or saltwater wetlands pursuant to North Carolina Administrative Code. The saltwater wetlands are defined to coincide with estuarine wetlands that are regulated by DCM. North Carolina also has a subclass Unique Wetlands which includes "wetlands of exceptional state or national ecological significance" and requires special additional regulatory protection to maintain existing uses.

### **Public Recreational Opportunities found in North Carolina Wetlands**

#### **Federal Agencies**

Wetlands make ideal places for people to experience passive outdoor recreation. Hiking, birding, wildlife viewing, photography, canoeing, camping and other activities can all be enjoyed in a wetland.

**U.S. Fish & Wildlife Service, National Wildlife Refuge Systems** exist primarily to safeguard wildlife populations through habitat preservation and, as such, offer prime opportunity to view or photograph birds and other wildlife. Other recreational opportunities vary, as do development and accessibility.

### National Wildlife Refuges located in North Carolina

Refuge	Recreational Aspects
Alligator River	Available for automobile touring, boating, fishing, hunting. Features two half-mile wheelchair-accessible nature trails: the Sandy Ridge Wildlife Trail, which is adjacent to 15 miles of paddle trails on Milltail Creek; and the Creef Cut Wildlife Trail, which also has a wheelchair-accessible fishing dock at its trailhead. Refuge Wildlife Drive offers opportunities to view a wide variety of birds, as well as black bears and red wolves.
Cedar Island	Available for boating, saltwater fishing, waterfowl hunting. The refuge is mainly a coastal marsh of 11,000 acres; there are two boat ramps. Concentrations of diving ducks, sea ducks, American black ducks, black rails, wading birds and shorebirds. Refuge is approximately 40 miles northeast of Beaufort via U.S. 70 and N.C. 12 at the confluence of Pamlico and Core sounds in Carteret County.
Great Dismal Swamp	Most of the refuge's 111,000 acres of forested wetlands are in Virginia but a portion extends into Camden, Pasquotank and Gates counties in North Carolina west of U.S. 17. The refuge is available for biking, boating, fishing and hiking, as well as bird and wildlife watching Lake Drummond, a 3,100 acre natural lake in Virginia, is at the heart of the swamp. The southern reaches of the refuge are adjacent to North Carolina's Dismal Swamp State Park.
Mackay Island	Available for bicycling, boating, fishing, hiking, hunting. Features a Charles Kuralt Trail observation site, an elevated platform with spotting scopes for views of the Great Marsh, plus seven miles of dikes suitable for walking or cycling. During fall and winter, tundra swans, ducks and large concentrations of snow geese congregate in the ponds south of the Great Marsh. Mackay Island is a portion of Knotts Island, which is accessible via private boat or free ferry at Currituck County Courthouse on N.C. 168 or via Princess Anne Road south from Pungo, Virginia. The refuge's Open Roads Days allow the public to drive the roads normally closed to vehicular traffic around the refuge impoundments at the end of Mackay Island Road.
Mattamuskeet	Available for automobile touring, boating, fishing, hiking, hunting. Lake Mattamuskeet (40,000 acres) is North Carolina's largest natural lake. The refuge has significant wintering populations of ducks, Canada geese, snow geese and tundra swans. Concentrations of bald eagles and other raptors, wading birds and shorebirds occur seasonally. Features 3-mile entrance road and 5-mile drive along lake, and miles of grassed dikes criss-crossing the refuge. There are several observation decks and two state boat ramps. Recent plans to renovate the lakeside Mattamuskeet Lodge as a lodge, meeting site and museum fell through when money ran out. The refuge is 9 miles east of Swan Quarter by U.S. 264 and N.C. 94 in Hyde County.

Refuge	Recreational Aspects
Pea Island	Available for boating, fishing, hiking. Features a visitor center, two wheelchair-accessible trails with an observation tower on one and an overlook on the other, a photography blind and 13 miles of beach. Concentrations of ducks, geese, swans, wading birds, shore birds, raptors, neotropical migrants are seasonally abundant on the refuge. On N.C. 12 north of Rodanthe on Hatteras Island in Dare County.
Pee Dee	Available for automobile touring, fishing, hiking, hunting. Habitat for more than 180 bird species, including wading birds, migratory waterfowl and songbirds Enter the refuge 7 miles north of Wadesboro on U.S. 52 in Anson County.
Pocosin Lakes	Available for automobile touring, fishing, hiking, and deer and small game hunting. Features three-quarter-mile Scuppernong River Interpretive Boardwalk, the Walter B. Jones Sr. Center for the Sounds interpretive visitors center, and observation and photography opportunities for tundra swans, snow geese and ducks, as well as black bear and other birds and animals. The visitor center is adjacent to the Tyrrell County Visitor Center on U.S. 64 in Columbia.
Roanoke River	Available for fishing, hiking, hunting. Concentrations of wintering waterfowl, nesting ducks, raptors, osprey and neo-tropical migrants are common The largest inland heron rookery in North Carolina is on the refuge. Bald eagles nest on adjacent lands; river corridor is wintering area for bald eagles. The refuge consists of five tracts of land along 70 miles of the Roanoke River and two distant satellite tracts in other river basins.
Swanquarter	Available for motorized boating, saltwater fishing, waterfowl hunting. Concentrations of diving ducks, sea ducks, American black ducks, wading birds and shorebirds The refuge supports one of the northernmost populations of the American alligator. There are four boat ramps (one accessible only via a trail), and a fishing pier at Bell Island. Refuge land on the north shore of Pamlico Sound east and west of the village of Swan Quarter is only accessible by boat, except for trails in the Bell Island Unit (2 miles west of Swan Quarter by U.S. 264) in Hyde County.
Proposed Mountain Bogs National Wildlife Refuge	<p>The U.S. Fish and Wildlife Service proposes to protect Southern Appalachian Mountain bogs, one of the nation's rarest and most imperiled plant and wildlife habitats, through the creation of the Mountain Bogs National Wildlife Refuge.</p> <p>The proposed refuge would eventually include up to 23,478 acres scattered across as many as 30 sites in Alleghany, Ashe, Avery, Clay, Graham, Henderson, Jackson, Macon, Transylvania, Wilkes, and Watauga counties, North Carolina; and Carter and Johnson counties, Tennessee.</p>

## **United States Department of Agriculture**

**The Croatan National Forest's** 160,000 acres have pine forests, saltwater estuaries, bogs and raised swamps called pocosins. Bordered on three sides by tidal rivers and the Bogue Sound, the forest is defined by water. A variety of recreational experiences are found in the Croatan National Forest such as hunting/fishing , camping, hiking, horseback riding, picnicking and biking. Moreover, visitors can enjoy the forest's wide diversity of wildlife- from deer, black bears and turkeys to wading birds, ospreys and alligators. Canoeing and boating are popular on blackwater creeks and saltwater marshes. The Croatan is also home to the carnivorous Venus fly-trap, sunder and pitcher plant.

## **National Park Service**

**Cape Lookout National Seashore** is a low, narrow, ribbon of sand running from Ocracoke Inlet on the northeast to Beaufort Inlet on the southwest. These barrier islands-56 miles long-consist mostly of wide, bare beaches with low dunes covered by scattered grasses, flat grasslands bordered by dense vegetation, and large expanses of salt marsh alongside the sound. Lying closest to the sound--the body of water between a barrier island and the mainland--the salt marsh is one of the most diverse ecosystems on an island. Many visitors come to view wildlife and can find many species of birds in the marsh feeding on the insects, fish, crabs, and other invertebrates that live there.

**Cape Hatteras National Seashore**, the nation's first national seashore, was established to preserve significant segments of unspoiled barrier islands along North Carolina's stretch of the Atlantic Coast. A large portion of the park is considered a salt marsh where visitors can hike, view wildlife, kayak, crab or fish. The park also allows limited waterfowl hunting.

## **State Agencies**

**North Carolina State Parks System** has several parks where wetland features are a recreational component of the park. These parks include Dismal Swamp, Goose Creek, Hammock Beach, Lake Waccamaw State, Merchants Mill Pond and Pettigrew state parks (see table below).

### North Carolina State Parks with Wetland Features

State Park Unit	Wetland Features / Recreational Features
Dismal Swamp State Park	<p>The Great Dismal Swamp is one of the largest protected swamp wildernesses in the eastern United States, with 38,000 acres in North Carolina and 82,000 acres in Virginia. The state park, which officially opened in March 2008, has a visitors center, a system of boardwalks, decks and gazebos, 16.7 miles of hiking and mountain biking trails, and bird watching and paddling opportunities.</p> <p>The park is adjacent to the Great Dismal Swamp National Wildlife Refuge. In December 2013, the largest known forested wetlands restoration project east of the Mississippi River was constructed in the park restoring hydrology to 9,580 acres.</p> <p>Funded by a North American Wetlands Conservation Act grant, the project restores habitat for over 200 species of migratory birds, helps to control wildfires, and sequesters mercury and atmospheric carbon.</p>
Carolina Beach State Park	<p>Three limesink ponds, each vegetated by a unique plant community, are found in the park. Cypress Pond, the most unusual limesink pond in the park, is dominated by a dwarf cypress swamp forest. Lily Pond is occupied by the broad, oval leaves and water lilies, which cover its waters in early summer.</p> <p>Grass Pond, which dries out almost every year, is filled with a variety of aquatic sedges. Carnivorous plants thrive in the boggy soil around its edge and in the park's acidic, mineral-poor soil. The park offers boating, camping, education events, exhibits and educational facilities, fishing, hiking, and picnicking.</p>
Goose Creek State Park	<p>This tranquil juncture of the broad, lazy Goose Creek and the Pamlico River is guarded by giant, old oaks draped with Spanish moss. The park offers boating, camping, education events, exhibits and educational facilities, fishing, hiking, picnicking and swimming.</p>



State Park Unit	Wetland Features / Recreational Features
Hammocks Beach State Park	<p>Bear Island, an 892-acre barrier island has one of the most unspoiled beaches on the Atlantic coast and is accessible only by passenger ferry or private boat. Huggins Island, located just east of Bear Island in the mouth of Bogue Inlet, is a 225-acre island with a maritime swamp forest.</p> <p>The 17-acre Jones Island became a part of the park in October 2007 and is managed as a state natural area. The park offers boating, camping, education and events, fishing, picnicking and swimming. The park also has a kayak, canoe and paddleboard rental concession</p>
Haw River State Park	<p>Located near the headwaters of the Haw River, Haw River State Park and the Summit Environmental Education Center are situated among piedmont forest, fields, wetlands and uplands on 1,374 acres in Guilford and Rockingham counties. The Summit is a retreat and conference center located on 210 acres in the park. The conference center includes eight meeting spaces, motel and dormitory-style sleeping facilities, indoor and outdoor common areas, a swimming pool, a six-acre lake, trails and a buffet-style dining room.</p>
Lake Waccamaw State Park	<p>One of the Carolina bays, Lake Waccamaw has species of animals found nowhere else on the planet, rare plants and endangered animals. The park offers camping, education and events, fishing, hiking, and picnicking.</p>
Merchants Mill Pond State Park	<p>Coastal pond and Southern swamp forest mingle to create one of North Carolina's rarest ecological communities - an "enchanted forest," with primitive species of fish, towering bald cypress trees with massive trunks and luxuriant growths of Spanish moss. The park offers camping, canoeing and canoe rentals, education and events, fishing (including small craft with trolling motors), hiking and picnicking. Many areas and activities are accessible to those with disabilities.</p>
Pettigrew State Park	<p>More than 1,200 acres of land and 16,600 acres of water on Lake Phelps blend nature, history and recreation. The park offers bird watching, boating, camping, education and events, fishing, hiking and picnicking. Native American dugout canoes found locally and on display are among the longest and oldest known. In December 2005, the state announced the addition of more than 2,500 acres along the Scuppernong River, including about four miles of river-front land, to Pettigrew. Its potential future use includes camping, canoeing, hiking, fishing, picnicking and wildlife viewing.</p>

The state parks system also manages state natural areas, some that protect wetland-type habitats. **Theodore Roosevelt Natural Area**, a 265 acre nature preserve adjacent to the North Carolina Aquarium at Pine Knoll Shores, includes a self-guiding nature trail showcasing the

barrier island ecosystem, containing maritime forest and marsh habitats. The marine habitat is a rich area for shellfish and abundant birdlife. Located along the northern shores of the Chowan River, in Gates County is the **Chowan Swamp Natural Area**. **Bushy Lake State Natural Area**, located in Cumberland County and managed by Jones Lake State Park, protects an area over 6300 acres of wet pocosin and carolina bay forest. **Pineola Bog, Beech Creek Bog and Sugar Mountain Bog** are three state natural areas which protect almost 300 acres of bog habitat in the western mountains of North Carolina.

### **North Carolina Wildlife Resources Commission Game Lands**

Hunters of North Carolina are provided with more than two million acres of game land to which to hunt on that is managed by the North Carolina Wildlife Resources Commission (WRC). Of that acreage, almost 500,000 acres spread over 44 preserves are located within the coastal plain and almost all of that land is considered wetlands. Equally abundant are the numerous boat launches located also in the coastal plain and are also managed by WRC which provide boat and canoe/kayak access to numerous bodies of water.

### **Open to the Public Non-Government Agency**

#### **The Nature Conservancy**

Located in Columbus and Brunswick Counties **Green Swamp Preserve** contains some of the country's finest examples of longleaf pine savannas. The open savannas have a diverse herb layer with many orchids and insectivorous plants. Almost 13,000 acres of the preserve are comprised of pocosin (shrub bog). Federal Paper Board donated 13,850 acres of this preserve to The Nature Conservancy in 1977 and an additional 2,577 acres in the late 1980s. The Nature Conservancy has since purchased additional land in the preserve. The Green Swamp contains at least 14 different species of insectivorous plants, including: extensive populations of Venus flytrap, sundew, and four species of pitcher plant. The preserve is also home to many rare animals, including: American alligator, fox squirrel, Henslow's sparrow, Bachman's sparrow, and Hessel's hairstreak butterfly. Visitors can hike, photograph wildlife and bird watch.

**The Boiling Spring Lakes Preserve**, 5000+ acres is owned by the State of North Carolina under North Carolina Department of Agriculture & Consumer Services – Plant Conservation Program and managed by The Nature Conservancy. The preserve located in Brunswick County ranks highest in the state in rare plant species (112). Many of those are found in the preserve. Boiling Springs Lake wetland complex contains a fascinating cross section of the Cape Fear region's natural communities. A series of parallel ridges and swales are the remnants of an ancient dune system. A large concentration of Carolina bays (elliptical wetland depressions) studs the landscape. Fire-dependent natural communities, including high and low pocosins (evergreen shrub bogs) and longleaf pine savannas on the ridges and bay rims, form an intricate mosaic of habitat. Many opportunities exist for hiking, birding, and identifying wildflowers and rare plants.

## **Local Governments**

Many local governments and municipalities in North Carolina have constructed multi-use trails in wetlands while expanding their greenway systems. For example the City of Cary has completed restoration of the aquatic and riparian ecosystems along the White Oak Creek Greenway. Furthermore, the town is looking at a total of seven (7) sites, located adjacent to Town greenway trails which are being proposed for restoration and/or stabilization.

The City of Raleigh, Walnut Creek Wetland Center is where visitors can explore the 58 acres of wetlands in downtown Raleigh. The Walnut Creek Wetland Center opened in 2009 to foster awareness of the importance of wetlands, wildlife habitat, hydrology, and human interaction with nature. McAlpine Creek Park in Charlotte is host to a beaver created wetland inside the park, where visitors can view beaver, turtles, ducks, and herons. Over in Union County at Cain Creek Park trails take visitors through wetland areas for opportunities to see birds, reptiles and amphibians.

Other examples where cities or agencies, have created opportunities for recreation in wetland areas are the utilization of reconstructed wetlands for wastewater treatment. The City of Goldsboro constructed wetlands to “polish” the wastewater. Treated waste water enters the constructed wetlands contains around 3 mg/L total nitrogen. The resulting “polished” water has about 1 mg/L total nitrogen remaining in it prior to being discharged into the Neuse River. The wetland treats water year round, even in the winter when the plants are dormant, due to the microbial organisms in the soils and roots. The summertime is particularly beautiful in the constructed wetlands when visitors can enjoy the scenery. A large variety of flowering plants, such as the Blue Flag Iris, Fragrant Water Lily, Spatterdock, Pickerel Weed, and American Lotus fill the basins.

The recreational benefits of wetlands are also found at the North Carolina Zoological Park, near Asheboro. A constructed stormwater wetland is different from a natural wetland in that it is designed to capture runoff from the streets, parking lots and rooftops and cleans it before entering a larger body of water. The Constructed Wetland is an exhibit designed to help educate visitors about the importance of wetlands to the environment and to serve as a filter system for rainwater runoff from the Zoo's North America parking lot.

And finally, the City of Boone Clawson –Burney Park contains a constructed wetland to treat stormwater runoff. In addition, it provides a unique ecosystem for lots of different species of plants, birds, amphibians, reptiles, insects, and mammals. Wetlands are important bird habitats because birds use them for breeding, nesting, rearing young, a source of drinking water, resting, and social interactions. Wetland vegetation also provides shelter from predators and from the weather. Lastly, this wetland park within the town is an area for the community to enjoy. The trail around the wetland provides a great view to observe what’s going on in the wetland. The trail is ADA accessible so that all may enjoy the sounds and surroundings of nature.

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## Appendix B

### **Methodology**



## **Public Input**

**Public Survey:** The North Carolina Division of Parks and Recreation conducted a public input survey to evaluate demand for, participation in, and perceptions of outdoor recreation opportunities in the state. The survey was conducted online using Survey Monkey and was distributed via multiple channels during May 2014. A series of press releases across the state invited the public to complete the survey that was available on the division's webpage. In total, the NC SCORP Public Input Survey yielded 17,535 responses.

As a component of the SCORP, the intent of the public survey was to gather information that will provide the state with a framework to address the need for improved outdoor recreation for the next five years. Questions from the survey broadly address areas such as outdoor recreation participation, satisfaction with statewide outdoor recreation opportunities, motivation for participation, barriers to participation, attitudes about recreation provider's priorities.

## **Presentations**

Informational sessions and requests for comments were conducted to stakeholders during the planning process. These included:

- 2014 North Carolina Municipal and County Park and Recreation Directors Annual Conference
- 2014 North Carolina Statewide Trails Conference
- 2014 North Carolina Recreation and Park Association Annual Conference
- 2014 North Carolina Association of County Commissioners Annual Conference (Information booth)
- 2014 North Carolina League of Municipalities Annual Conference (Information booth)

## **Public Review**

The draft plan will be made available for public comment in early 2015 prior to adoption and submission to the National Park Service.

## **Inventory of Park Areas and Facilities**

**Population Growth and Density** – The information about county population counts and estimates is taken from the North Carolina State Data Center's web page. The county population totals and projections for 2000, 2010, and 2020 and are for July of those years. The population densities and growth are also from the State Data Center web pages. The state rankings are calculated using the information provided.

**Public Recreational Acreage and Facility Inventory** –The data collection process for local governments began with the results of the inventory of local governments conducted for the 2009-2013 SCORP. The Division of Parks and Recreation used the results of the inventory over 400 county and municipal governments as the basis for the 2014 inventory.

A request via email in the Spring of 2014 was sent to all local governments in the state (over 550). A follow-up request was sent to non-respondents. Each local government was asked to update inventory records to reflect the current recreational acreage and facilities that they managed for public recreation. The request resulted in 246 updated records. A similar survey of local governments was conducted in 2009. In addition, records were added for local governments that did not respond to the survey but did have LWCF and PARTF projects that included either park acreage or recreation facilities. Combining information collected in 2014 with the inventory from 2009 and information from PARTF and LWCF projects, the inventory in this document includes information from 470 local governments in North Carolina.

For state and federal agencies, the Division of Parks and Recreation used the data layers containing property boundaries supplied by each agency to the state's geographic information system (GIS). The property information was compared to the county-boundary data layer to calculate the acreage by county for each agency.

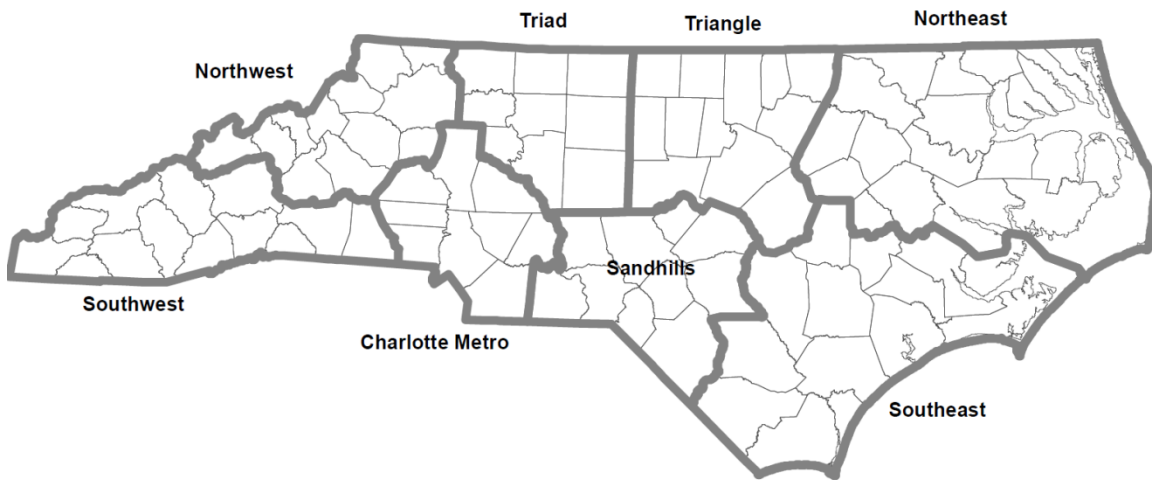
### **Geographic Regions**

The eight regions used for analysis in the plan are displayed below. The regions were developed at the request of Parks and Recreation Authority to consider the geographic distribution of Park and Recreation Trust Fund grants across North Carolina. The regions were approved by the board in March 2012. The factors used in developing the regions included:

- Understandable areas that encompass the main population centers in the state: Charlotte Metro, Triad, and Triangle.
- A balance between having enough regions to consider geographic distribution, but not too many so that regions are difficult to compare. Some of the standard regions available used too few regions (Three – Mountains, Piedmont, Coastal) or too many regions (North Carolina's 16 planning regions).
- A balance between the population of a region and the number of counties in the region.
- As shown in the table, six of the eight regions encompass between nine and 14 counties. As for population, five of the eight regions have between 900,000 and 2.1 million people.
- The eight regions provide a reasonable division of the state. The state is divided into four regions in the northern half of the state and four regions in the southern half of the state.



<b>Region</b>	<b># of Counties</b>	<b>2010 Population</b>
Northwest	12	487,760
Southwest	13	761,019
Triad	9	1,442,646
Charlotte Metro	9	2,104,755
Triangle	12	1,947,624
Sandhills	10	908,446
Northeast	21	792,357
Southeast	14	1,141,620
Total	100	9,586,227



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## **Appendix C**

### **Public Preference Survey**



1. Why do you participate in outdoor recreation activities? (Check all that apply)

	Percentage Responding
Be outdoors	93%
Have fun	87%
Relaxation	78%
To be closer to nature	64%
To be with family and friends	63%
It is free and/or affordable	60%
Exercise or physical fitness	59%
Visit/see new places and things	57%
Solitude (to spend time by myself)	49%
Escape urban setting	43%
To learn	39%
For the challenge	28%

2. Please indicate which of the following activities you or members of your household participate in or have participated in the past 5 years.

	Percentage Responding
Visiting a beach or lake	69%
Walking for Pleasure or Exercise	61%
Visiting parks or Historical Sites	60%
Hiking, Trails	59%
Fishing - Freshwater, bank or pier	58%
Viewing scenery	52%
Fishing - Freshwater, boat	50%
Nature viewing	50%
Swimming, All types	50%
Gardening	49%
Hunting, Gun	47%
Shooting, Target Firing Range	46%
Boating - Power, Freshwater	46%
Canoeing, Kayaking	45%
Picnicking	45%
Fishing - Saltwater, on-shore or pier	45%
Camping, Developed site	44%
Fishing - Saltwater, boat	37%
Outdoor Fairs Festivals	37%
Driving for Pleasure	34%
Camping, Primitive	34%
Backpacking	33%
Visiting Zoos	33%
Nature Photography	33%
Shooting , Skeet	31%
Bird Watching	31%
Boating - Power, Saltwater	31%

	Percentage Responding
Open Space Park, Relaxing	30%
Archery	28%
Bicycling, On-road	28%
Jogging, Running for exercise (on and off-road)	26%
Hunting, Bow	26%
Golf, 18-hole, 9-hole, driving range	22%
Bicycling, BMX or Off-Road	22%
Playground Activities	22%
Tubing	22%
4WD, Other high-clearance vehicle	21%
Baseball, Softball	20%
Water Parks	18%
Golf, Miniature	18%
Spectator Activities	18%
Dog Parks	17%
Frisbee, Disc Golf, Kite Flying	16%
Quad or All Terrain Vehicle Driving	15%
Collecting (flowers, insects, rocks)	14%
Water skiing, Jet skiing	13%
Basketball, Outdoor	13%
SCUBA/Snorkeling	13%
Skiing, Down Hill	12%
Tennis	11%
Horseback Riding, Trails	11%
Horseback Riding, General	11%
Soccer	10%
Utility Terrain Vehicle, Mod. Golf Cart	9%
Splash Pool, Sprayground	9%
Volleyball, Badminton	9%
Football (playing)	8%
Rappelling, Rock Climbing	8%
Geocaching	7%
Surfing, All Types	7%
Motorized Trail Biking, Dirt Biking	7%
Orienteering	6%
Sailing, Saltwater	6%
Sailing, Freshwater	5%
Radio, Remote Control Models	5%
CrossFit Training	5%
Skiing, Cross Country, Snow Shoeing	5%
Skateboarding	4%
Spelunking (Caves)	4%
Rollerskating	3%
Other (please specify)	3%
Rollerblading, Inline skating	3%
Swimming (Competitive)	3%
Ice Skating, outside	3%
Triathlon	3%
Shuffleboard	2%
Lacrosse	2%



	Percentage Responding
Windsurfing, Kitesurfing	1%
Rugby	1%
Cricket	0.3%

3. Where have you participated in outdoor activities in the past twelve months? (Check all that apply).

	Percentage Responding
State parks, forests, or state historic sites	83%
Local parks (i.e. city or county)	76%
National Forests, National Parks or federal lands	67%
Quasi-public or private (i.e. YMCA, Boys and Girls Clubs, country clubs)	20%

4. How many times have you or any member of your household visited a local, state or national park, historic site, or forest in the last twelve months?

	Percentage Responding
Local parks/sites - More than 8 times	35%
Local parks/sites - 3-5 times	20%
Local parks/sites - 1-2 times	17%
Local parks/sites - 6-8 times	12%
Local parks/sites - None	4%
State parks/sites - 3-5 times	28%
State parks/sites - More than 8 times	22%
State parks/sites - 1-2 times	22%
State parks/sites - 6-8 times	14%
State parks/sites - None	4%
National parks/sites - 1-2 times	29%
National parks/sites - 3-5 times	21%
National parks/sites - More than 8 times	14%
National parks/sites - None	10%
National parks/sites - 6-8 times	8%

5. In the past twelve months, do you think that you or any member of your household visited local, state and/or national parks, historic sites or forests...

	Percentage Responding
Local parks/sites - More frequently?	26%
Local parks/sites - Less frequently?	12%
Local parks/sites - With the same frequency?	47%
State parks/sites - More frequently?	23%

	Percentage Responding
State parks/sites - Less frequently?	15%
State parks/sites - With the same frequency?	50%
National parks/sites - More frequently?	17%
National parks/sites - Less frequently?	20%
National parks/sites - With the same frequency?	47%

6. During the past twelve months, what proportion of your trips to participate in outdoor activities at local, state and/or national parks were overnight versus day trips?

	Percentage Responding
Local parks/sites - 0%	62%
Local parks/sites - 10%	9%
Local parks/sites - 25%	5%
Local parks/sites - 50%	5%
Local parks/sites - 75%	3%
Local parks/sites - 100%	2%
State parks/sites - 0%	37%
State parks/sites - 10%	17%
State parks/sites - 25%	13%
State parks/sites - 50%	11%
State parks/sites - 75%	6%
State parks/sites - 100%	6%
National parks/sites - 0%	34%
National parks/sites - 10%	13%
National parks/sites - 25%	9%
National parks/sites - 50%	10%
National parks/sites - 75%	7%
National parks/sites - 100%	13%

7. During the past twelve months, when spending the night away from home to participate in outdoor recreation, what accommodations did you use? (Check all that apply).

	Percentage Responding
Friend or relative's home	24%
Tent camping	34%
RV camping	16%
Vacation rental	26%
Hotel/motel	47%
Cabin/yurt	15%
Bed and breakfast	8%
I did not stay overnight	13%

8. When visiting local, state and/or national parks what is your average travel time from your home?

	Percentage Responding
Local parks/sites - Under 30 minutes	50%
Local parks/sites - 30 minutes to 1 hour	23%
Local parks/sites - 1 to 2 hours	8%
Local parks/sites - 2 to 5 hours	4%
Local parks/sites - More than 5 hours	1%
State parks/sites - Under 30 minutes	9%
State parks/sites - 30 minutes to 1 hour	26%
State parks/sites - 1 to 2 hours	29%
State parks/sites - 2 to 5 hours	19%
State parks/sites - More than 5 hours	4%
National parks/sites - Under 30 minutes	4%
National parks/sites - 30 minutes to 1 hour	8%
National parks/sites - 1 to 2 hours	16%
National parks/sites - 2 to 5 hours	35%
National parks/sites - More than 5 hours	18%

9. How important to you and your household is the availability of...

	Percentage Responding
Local parks/sites - Not at all important	2%
Local parks/sites - Somewhat important	22%
Local parks/sites - Extremely important	66%
State parks/sites - Not at all important	1%
State parks/sites - Somewhat important	19%
State parks/sites - Extremely important	72%
National parks/sites - Not at all important	3%
National parks/sites - Somewhat important	22%
National parks/sites - Extremely important	66%

10. Please tell us how well you think the following are currently meeting your household's needs.

	Percentage Responding
Local parks/sites - Not at all meeting needs	6%
Local parks/sites - Somewhat meeting needs	51%
Local parks/sites - Completely meeting needs	33%
State parks/sites - Not at all meeting needs	4%
State parks/sites - Somewhat meeting needs	51%
State parks/sites - Completely meeting needs	36%
National parks/sites - Not at all meeting needs	6%
National parks/sites - Somewhat meeting needs	46%
National parks/sites - Completely meeting needs	36%

11. Please rate the importance of access to trails connecting to outdoor recreation opportunities for local, state and national parks in North Carolina. These would include separate non-motorized active transportation trails to outdoor recreation sites.

	Percentage Responding
Trail access in local parks/sites - Not at all important	8%
Trail access in local parks/sites - Somewhat important	32%
Trail access in local parks/sites - Extremely Important	49%
Trail access in state parks/sites - Not at all important	6%
Trail access in state parks/sites - Somewhat important	30%
Trail access in state parks/sites - Extremely Important	55%
Trail access in national parks/sites - Not at all important	7%
Trail access in national parks/sites - Somewhat important	28%
Trail access in national parks/sites - Extremely Important	53%

12. How important to you is WiFi availability while you are participating in outdoor recreation activities...

	Percentage Responding
At local parks/sites? - Not at all important	55%
At local parks/sites? - Somewhat important	27%
At local parks/sites? - Extremely Important	9%
At state parks/sites? - Not at all important	55%
At state parks/sites? - Somewhat important	29%
At state parks/sites? - Extremely Important	9%
At national parks/sites? - Not at all important	54%
At national parks/sites? - Somewhat important	27%
At national parks/sites? - Extremely Important	9%

13. Please rate your satisfaction with outdoor recreation in North Carolina in the following areas:

	<b>Percentage Responding</b>
Efforts to purchase land for preservation and recreation - Not at all satisfied	11%
Efforts to purchase land for preservation and recreation - Somewhat satisfied	58%
Efforts to purchase land for preservation and recreation - Extremely satisfied	16%
Providing outdoor recreation opportunities - Not at all satisfied	6%
Providing outdoor recreation opportunities - Somewhat satisfied	54%
Providing outdoor recreation opportunities - Extremely satisfied	27%
Providing adequate environmental education opportunities - Not at all satisfied	7%
Providing adequate environmental education opportunities - Somewhat satisfied	55%
Providing adequate environmental education opportunities - Extremely satisfied	23%
Management of public land and water resources - Not at all satisfied	13%
Management of public land and water resources - Somewhat satisfied	53%
Management of public land and water resources - Extremely satisfied	20%
Do you have any comments you would like to offer regarding the question above?	18%

14. Please rate your satisfaction with the amount of public access to natural bodies of water near your home:

	<b>Percentage Responding</b>
- Not at all satisfied	11%
- Somewhat satisfied	49%
- Extremely satisfied	28%

15. Which of the following word phrases indicates what emphasis you would like to see outdoor recreation providers in North Carolina pursue?

	Percentage Responding
Emphasis on natural resource preservation/protection	12%
Emphasis on providing outdoor recreation in natural settings	16%
Equal balance between preservation/protection and outdoor recreation	61%

16. Outdoor recreation providers often need to prioritize their efforts. Please rank the following priorities in order of importance from 1 (highest) to 6 (lowest). Start by selecting your top ranked (highest) priority and select the number 1 from the drop-down. Choose your second priority, and select the number 2, etc.

	Percentage Responding
Acquisition of new parks and open space - 1	24%
Acquisition of new parks and open space - 2	16%
Acquisition of new parks and open space - 3	12%
Acquisition of new parks and open space - 4	11%
Acquisition of new parks and open space - 5	10%
Acquisition of new parks and open space - 6	14%
Development of new facilities at existing recreation sites - 1	11%
Development of new facilities at existing recreation sites - 2	21%
Development of new facilities at existing recreation sites - 3	19%
Development of new facilities at existing recreation sites - 4	16%
Development of new facilities at existing recreation sites - 5	13%
Development of new facilities at existing recreation sites - 6	7%
Operation and maintenance of existing infrastructure and facilities - 1	31%
Operation and maintenance of existing infrastructure and facilities - 2	20%
Operation and maintenance of existing infrastructure and facilities - 3	19%
Operation and maintenance of existing infrastructure and facilities - 4	11%
Operation and maintenance of existing infrastructure and facilities - 5	5%
Operation and maintenance of existing infrastructure and facilities - 6	2%
Transforming existing facilities to serve new purposes - 1	4%
Transforming existing facilities to serve new purposes - 2	9%
Transforming existing facilities to serve new purposes - 3	14%



	<b>Percentage Responding</b>
Transforming existing facilities to serve new purposes - 4	23%
Transforming existing facilities to serve new purposes - 5	20%
Transforming existing facilities to serve new purposes - 6	17%
Providing local, regional, and statewide trails - 1	13%
Providing local, regional, and statewide trails - 2	14%
Providing local, regional, and statewide trails - 3	12%
Providing local, regional, and statewide trails - 4	13%
Providing local, regional, and statewide trails - 5	24%
Providing local, regional, and statewide trails - 6	11%
Providing educational programs and visitor services - 1	4%
Providing educational programs and visitor services - 2	7%
Providing educational programs and visitor services - 3	11%
Providing educational programs and visitor services - 4	14%
Providing educational programs and visitor services - 5	16%
Providing educational programs and visitor services - 6	36%

17. What are the greatest barriers to you/your family participating more frequently in outdoor activities, if any? (Check all that apply).

	<b>Percentage Responding</b>
Physical or health limitation	15%
Cost	21%
Lack of time	59%
Participate in other recreational activities or hobbies that are not outdoor	8%
Lack of available facilities	23%
Quality or condition of facilities	13%
Safety concerns	7%
Lack of interest	2%

18. How important is it to you that your local government, state government, and the federal government spend public funds to acquire land to develop outdoor recreation areas in North Carolina?

	<b>Percentage Responding</b>
Local - Not at all important	9%
Local - Somewhat important	35%
Local - Extremely important	43%
State - Not at all important	6%
State - Somewhat important	31%
State - Extremely important	51%
Federal - Not at all important	10%
Federal - Somewhat important	30%
Federal - Extremely important	47%

19. Which of the following would you support as an alternative source of funding for land acquisition and/or development of outdoor recreational areas and/or facilities? (Check all that apply).

	<b>Percentage Responding</b>
Park entry fees	34%
Commercial user fees	40%
User fees (e.g. permits)	36%
Taxes	28%
Donations	61%
Concessions and sales	55%
Dedicated funding source	43%
None	3%

## **Appendix D**

### **Recreation Provider Survey**



1. What type of governmental entity do you represent?

	Percentage Responding
City/town	33%
County	16%
State	36%
Federal	6%
Quasi-Public/Nonprofit	9%

2. Do you have a system-wide master plan/comprehensive plan for your parks and outdoor recreation sites, facilities and services?

	Percentage Responding
Yes	74%
No	12%

3. Rate the usefulness of your system-wide masterplan/comprehensive plan for your park/park system.

	Percentage Responding
Prioritizing overall needs for your park system - Not useful	2%
Prioritizing overall needs for your park system - Somewhat useful	16%
Prioritizing overall needs for your park system - Useful	59%
Prioritizing overall needs for your park system - N/A	10%
Prioritizing decisions related to providing high quality recreation experiences in your park system - Not useful	2%
Prioritizing decisions related to providing high quality recreation experiences in your park system - Somewhat useful	22%
Prioritizing decisions related to providing high quality recreation experiences in your park system - Useful	51%
Prioritizing decisions related to providing high quality recreation experiences in your park system - N/A	12%
Prioritizing development of recreation facilities in your park system - Not useful	3%
Prioritizing development of recreation facilities in your park system - Somewhat useful	16%
Prioritizing development of recreation facilities in your park system - Useful	56%
Prioritizing development of recreation facilities in your park system - N/A	11%
Prioritizing acquisition of land for your park system - Not useful	3%
Prioritizing acquisition of land for your park system - Somewhat useful	22%

4. Rate the level of difficulty in obtaining funds for your park/park system across the areas listed below.

	<b>Percentage Responding</b>
Obtaining new facility development funds - Difficult	48%
Obtaining new facility development funds - Somewhat difficult	33%
Obtaining new facility development funds - Not difficult	2%
Obtaining new facility development funds - N/A	2%
Obtaining major renovation funds - Difficult	45%
Obtaining major renovation funds - Somewhat difficult	33%
Obtaining major renovation funds - Not difficult	4%
Obtaining major renovation funds - N/A	3%
Obtaining land acquisition funds - Difficult	51%
Obtaining land acquisition funds - Somewhat difficult	21%
Obtaining land acquisition funds - Not difficult	4%
Obtaining land acquisition funds - N/A	10%
Obtaining facility replacement funds - Difficult	44%
Obtaining facility replacement funds - Somewhat difficult	31%
Obtaining facility replacement funds - Not difficult	4%
Obtaining facility replacement funds - N/A	7%
Obtaining outdoor recreation and education programming funds - Difficult	28%
Obtaining outdoor recreation and education programming funds - Somewhat difficult	32%
Obtaining outdoor recreation and education programming funds - Not difficult	18%
Obtaining outdoor recreation and education programming funds - N/A	6%
Obtaining inclusive recreation facility and programming funds - Difficult	31%
Obtaining inclusive recreation facility and programming funds - Somewhat difficult	30%
Obtaining inclusive recreation facility and programming funds - Not difficult	13%
Obtaining inclusive recreation facility and programming funds - N/A	10%
Obtaining overall administration funds - Difficult	22%
Obtaining overall administration funds - Somewhat difficult	36%
Obtaining overall administration funds - Not difficult	25%
Obtaining overall administration funds - N/A	3%
Obtaining daily maintenance funds - Difficult	16%
Obtaining daily maintenance funds - Somewhat difficult	39%
Obtaining daily maintenance funds - Not difficult	27%
Obtaining daily maintenance funds - N/A	3%



5. Rate the level of difficulty related to MEETING PUBLIC NEEDS in your park system.

	<b>Percentage Responding</b>
Meeting demand for a growing population - Difficult	31%
Meeting demand for a growing population - Somewhat difficult	41%
Meeting demand for a growing population - Not difficult	12%
Meeting demand for a growing population - N/A	2%
Meeting the need for undeveloped public lands - Difficult	31%
Meeting the need for undeveloped public lands - Somewhat difficult	26%
Meeting the need for undeveloped public lands - Not difficult	14%
Meeting the need for undeveloped public lands - N/A	16%
Meeting the need for athletic fields/complexes - Difficult	28%
Meeting the need for athletic fields/complexes - Somewhat difficult	20%
Meeting the need for athletic fields/complexes - Not difficult	7%
Meeting the need for athletic fields/complexes - N/A	31%
Meeting the needs of youth through provision of facilities, services and programs - Difficult	22%
Meeting the needs of youth through provision of facilities, services and programs - Somewhat difficult	43%
Meeting the needs of youth through provision of facilities, services and programs - Not difficult	16%
Meeting the needs of youth through provision of facilities, services and programs - N/A	4%
Meeting the needs of off-leash dog areas - Difficult	24%
Meeting the needs of off-leash dog areas - Somewhat difficult	13%
Meeting the needs of off-leash dog areas - Not difficult	15%
Meeting the needs of off-leash dog areas - N/A	33%
Meeting the needs of off-street walking or biking paths - Difficult	22%
Meeting the needs of off-street walking or biking paths - Somewhat difficult	31%
Meeting the needs of off-street walking or biking paths - Not difficult	18%
Meeting the needs of off-street walking or biking paths - N/A	14%
Meeting the needs of older people through provision of facilities, services and programs - Difficult	14%
Meeting the needs of older people through provision of facilities, services and programs - Somewhat difficult	39%
Meeting the needs of older people through provision of facilities, services and programs - Not difficult	27%

	<b>Percentage Responding</b>
Meeting the needs of older people through provision of facilities, services and programs - N/A	5%
Meeting accessibility standards for people with disabilities - Difficult	22%
Meeting accessibility standards for people with disabilities - Somewhat difficult	39%
Meeting accessibility standards for people with disabilities - Not difficult	23%
Meeting accessibility standards for people with disabilities - N/A	1%
Meeting demand for public access to water for swimming, boating or fishing - Difficult	24%
Meeting demand for public access to water for swimming, boating or fishing - Somewhat difficult	19%
Meeting demand for public access to water for swimming, boating or fishing - Not difficult	26%
Meeting demand for public access to water for swimming, boating or fishing - N/A	17%
Meeting the needs of diverse cultures - Difficult	15%
Meeting the needs of diverse cultures - Somewhat difficult	39%
Meeting the needs of diverse cultures - Not difficult	29%
Meeting the needs of diverse cultures - N/A	3%
Providing a safe environment - Difficult	6%
Providing a safe environment - Somewhat difficult	27%
Providing a safe environment - Not difficult	52%
Providing a safe environment - N/A	1%
Meeting the needs of families - Difficult	4%
Meeting the needs of families - Somewhat difficult	33%
Meeting the needs of families - Not difficult	43%
Meeting the needs of families - N/A	3%
Meeting the needs for adventure programming - Difficult	17%
Meeting the needs for adventure programming - Somewhat difficult	38%
Meeting the needs for adventure programming - Not difficult	15%
Meeting the needs for adventure programming - N/A	16%

6. Rate the level of difficulty related to the following LAND PROTECTION issues facing your park/park system.

	<b>Percentage Responding</b>
Preserving land for future recreational development - Difficult	29%
Preserving land for future recreational development - Somewhat difficult	29%
Preserving land for future recreational development - Not	19%

	<b>Percentage Responding</b>
difficult	
Preserving land for future recreational development - N/A	7%
Preserving significant natural resource areas - Difficult	26%
Preserving significant natural resource areas - Somewhat difficult	32%
Preserving significant natural resource areas - Not difficult	22%
Preserving significant natural resource areas - N/A	5%
Preserving open space lands - Difficult	26%
Preserving open space lands - Somewhat difficult	30%
Preserving open space lands - Not difficult	21%
Preserving open space lands - N/A	8%
Preserving land for cultural resources - Difficult	23%
Preserving land for cultural resources - Somewhat difficult	31%
Preserving land for cultural resources - Not difficult	19%
Preserving land for cultural resources - N/A	12%
Preserving land for historical resources - Difficult	23%
Preserving land for historical resources - Somewhat difficult	28%
Preserving land for historical resources - Not difficult	18%
Preserving land for historical resources - N/A	14%

7. Rate the level of difficulty related to the following MANAGEMENT issues facing your park/park system.

	<b>Percentage Responding</b>
Providing adequate staffing levels - Difficult	49%
Providing adequate staffing levels - Somewhat difficult	29%
Providing adequate staffing levels - Not difficult	7%
Providing adequate staffing levels - N/A	1%
Maintaining existing recreation infrastructure and resources - Difficult	31%
Maintaining existing recreation infrastructure and resources - Somewhat difficult	45%
Maintaining existing recreation infrastructure and resources - Not difficult	8%
Maintaining existing recreation infrastructure and resources - N/A	2%
Enforcing rules and regulations - Difficult	13%
Enforcing rules and regulations - Somewhat difficult	47%
Enforcing rules and regulations - Not difficult	24%
Enforcing rules and regulations - N/A	1%
Alleviating visitor impacts on natural resources - Difficult	18%
Alleviating visitor impacts on natural resources - Somewhat difficult	42%
Alleviating visitor impacts on natural resources - Not difficult	21%
Alleviating visitor impacts on natural resources - N/A	4%

	<b>Percentage Responding</b>
Informing visitors of rules and regulations - Difficult	11%
Informing visitors of rules and regulations - Somewhat difficult	40%
Informing visitors of rules and regulations - Not difficult	34%
Informing visitors of rules and regulations - N/A	1%
Alleviating user conflicts - Difficult	9%
Alleviating user conflicts - Somewhat difficult	39%
Alleviating user conflicts - Not difficult	33%
Alleviating user conflicts - N/A	2%
Setting fees so that costs do not hinder participation - Difficult	15%
Setting fees so that costs do not hinder participation - Somewhat difficult	28%
Setting fees so that costs do not hinder participation - Not difficult	37%
Setting fees so that costs do not hinder participation - N/A	6%
Working with other outdoor recreation providers - Difficult	5%
Working with other outdoor recreation providers - Somewhat difficult	24%
Working with other outdoor recreation providers - Not difficult	47%
Working with other outdoor recreation providers - N/A	9%

8. Rate the overall importance of the issues facing your park/park system.

	<b>Percentage Responding</b>
Funding - Not important	1%
Funding - Somewhat important	2%
Funding - Important	82%
Funding - N/A	0%
Meeting Public Needs - Not important	1%
Meeting Public Needs - Somewhat important	12%
Meeting Public Needs - Important	71%
Meeting Public Needs - N/A	1%
Management - Not important	3%
Management - Somewhat important	21%
Management - Important	61%
Management - N/A	1%
Land Protection - Not important	3%
Land Protection - Somewhat important	28%
Land Protection - Important	51%
Land Protection - N/A	3%

9. Rate the importance of the types of parks/areas NEEDED NOW in your park system.

	<b>Percentage Responding</b>
Linear parks - trail linkages within your park system - Not important	11%
Linear parks - trail linkages within your park system - Somewhat important	23%
Linear parks - trail linkages within your park system - Important	44%
Linear parks - trail linkages within your park system - N/A	7%
Linear parks - trail linkages to other jurisdictions - Not important	15%
Linear parks - trail linkages to other jurisdictions - Somewhat important	28%
Linear parks - trail linkages to other jurisdictions - Important	29%
Linear parks - trail linkages to other jurisdictions - N/A	12%
Nature/conservation parks - Not important	12%
Nature/conservation parks - Somewhat important	33%
Nature/conservation parks - Important	33%
Nature/conservation parks - N/A	6%
Specialty parks (dog parks, skate parks, water parks, etc.) - Not important	15%
Specialty parks (dog parks, skate parks, water parks, etc.) - Somewhat important	28%
Specialty parks (dog parks, skate parks, water parks, etc.) - Important	27%
Specialty parks (dog parks, skate parks, water parks, etc.) - N/A	16%
Neighborhood/pocket parks - Not important	18%
Neighborhood/pocket parks - Somewhat important	28%
Neighborhood/pocket parks - Important	16%
Neighborhood/pocket parks - N/A	23%
Community parks - Not important	12%
Community parks - Somewhat important	23%
Community parks - Important	32%
Community parks - N/A	19%
Camping areas - Not important	23%
Camping areas - Somewhat important	27%
Camping areas - Important	21%
Camping areas - N/A	14%
Sports complexes - Not important	16%
Sports complexes - Somewhat important	19%
Sports complexes - Important	28%
Sports complexes - N/A	22%
Water-front parks - Not important	23%
Water-front parks - Somewhat important	18%
Water-front parks - Important	19%
Water-front parks - N/A	23%

	<b>Percentage Responding</b>
Regional/district parks - Not important	16%
Regional/district parks - Somewhat important	21%
Regional/district parks - Important	23%
Regional/district parks - N/A	24%
Cultural/historic parks - Not important	12%
Cultural/historic parks - Somewhat important	34%
Cultural/historic parks - Important	23%
Cultural/historic parks - N/A	17%
State Parks - Not important	16%
State Parks - Somewhat important	13%
State Parks - Important	29%
State Parks - N/A	25%
Equestrian facilities - Not important	33%
Equestrian facilities - Somewhat important	19%
Equestrian facilities - Important	11%
Equestrian facilities - N/A	21%
Linear parks - trail linkages within your park system - Not important	20%

10. Please indicate the most urgent facility needs in your park/park system.

	<b>Percentage Responding</b>
Natural park area/open space - Not urgent	20%
Natural park area/open space - Somewhat urgent	34%
Natural park area/open space - Urgent	24%
Natural park area/open space - N/A	5%
Nature/interpretive trails - Not urgent	18%
Nature/interpretive trails - Somewhat urgent	38%
Nature/interpretive trails - Urgent	20%
Nature/interpretive trails - N/A	6%
Paved trails for walking, hiking, skating or biking - Not urgent	18%
Paved trails for walking, hiking, skating or biking - Somewhat urgent	22%
Paved trails for walking, hiking, skating or biking - Urgent	31%
Paved trails for walking, hiking, skating or biking - N/A	12%
Unpaved trails for walking and hiking - Not urgent	16%
Unpaved trails for walking and hiking - Somewhat urgent	33%
Unpaved trails for walking and hiking - Urgent	29%
Unpaved trails for walking and hiking - N/A	4%
Nature/interpretive centers - Not urgent	28%
Nature/interpretive centers - Somewhat urgent	27%
Nature/interpretive centers - Urgent	20%
Nature/interpretive centers - N/A	8%



	<b>Percentage Responding</b>
Wildlife/nature observation sites - Not urgent	21%
Wildlife/nature observation sites - Somewhat urgent	34%
Wildlife/nature observation sites - Urgent	21%
Wildlife/nature observation sites - N/A	8%
Dog parks - Not urgent	27%
Dog parks - Somewhat urgent	25%
Dog parks - Urgent	10%
Dog parks - N/A	22%
Skate parks - Not urgent	35%
Skate parks - Somewhat urgent	15%
Skate parks - Urgent	7%
Skate parks - N/A	26%
Water parks - Not urgent	27%
Water parks - Somewhat urgent	16%
Water parks - Urgent	12%
Water parks - N/A	30%
Non-swimming water activities (splashpad, sprayground) - Not urgent	20%
Non-swimming water activities (splashpad, sprayground) - Somewhat urgent	14%
Non-swimming water activities (splashpad, sprayground) - Urgent	24%
Non-swimming water activities (splashpad, sprayground) - N/A	24%
Playgrounds - Not urgent	20%
Playgrounds - Somewhat urgent	24%
Playgrounds - Urgent	22%
Playgrounds - N/A	16%
Picnic shelters - Not urgent	20%
Picnic shelters - Somewhat urgent	33%
Picnic shelters - Urgent	26%
Picnic shelters - N/A	4%
Picnic areas - Not urgent	23%
Picnic areas - Somewhat urgent	36%
Picnic areas - Urgent	20%
Picnic areas - N/A	5%
Camping facilities - Not urgent	31%
Camping facilities - Somewhat urgent	30%
Camping facilities - Urgent	9%
Camping facilities - N/A	13%
Swimming pools - Not urgent	24%
Swimming pools - Somewhat urgent	14%
Swimming pools - Urgent	21%
Swimming pools - N/A	25%
Softball fields - Not urgent	19%
Softball fields - Somewhat urgent	19%

	<b>Percentage Responding</b>
Softball fields - Urgent	19%
Softball fields - N/A	25%
Baseball fields - Not urgent	24%
Baseball fields - Somewhat urgent	17%
Baseball fields - Urgent	16%
Baseball fields - N/A	26%
Soccer fields - Not urgent	19%
Soccer fields - Somewhat urgent	18%
Soccer fields - Urgent	21%
Soccer fields - N/A	26%
Multi-use fields - Not urgent	21%
Multi-use fields - Somewhat urgent	23%
Multi-use fields - Urgent	26%
Multi-use fields - N/A	14%
Basketball courts - Not urgent	31%
Basketball courts - Somewhat urgent	18%
Basketball courts - Urgent	11%
Basketball courts - N/A	24%
Fishing piers - Not urgent	28%
Fishing piers - Somewhat urgent	27%
Fishing piers - Urgent	9%
Fishing piers - N/A	21%
Mountain bike trails - Not urgent	22%
Mountain bike trails - Somewhat urgent	29%
Mountain bike trails - Urgent	18%
Mountain bike trails - N/A	14%
Shore/bank fishing - Not urgent	33%
Shore/bank fishing - Somewhat urgent	23%
Shore/bank fishing - Urgent	11%
Shore/bank fishing - N/A	17%
Volleyball courts - Not urgent	26%
Volleyball courts - Somewhat urgent	25%
Volleyball courts - Urgent	7%
Volleyball courts - N/A	25%
Football fields - Not urgent	29%
Football fields - Somewhat urgent	19%
Football fields - Urgent	7%
Football fields - N/A	28%
Non-motorized boating access (canoe, kayak) - Not urgent	23%
Non-motorized boating access (canoe, kayak) - Somewhat urgent	29%
Non-motorized boating access (canoe, kayak) - Urgent	18%
Non-motorized boating access (canoe, kayak) - N/A	14%
Tennis courts - Not urgent	26%
Tennis courts - Somewhat urgent	18%

	<b>Percentage Responding</b>
Tennis courts - Urgent	14%
Tennis courts - N/A	24%
Motorized, off-highway vehicle trails - Not urgent	41%
Motorized, off-highway vehicle trails - Somewhat urgent	8%
Motorized, off-highway vehicle trails - Urgent	6%
Motorized, off-highway vehicle trails - N/A	29%
Horseback riding trails - Not urgent	39%
Horseback riding trails - Somewhat urgent	17%
Horseback riding trails - Urgent	6%
Horseback riding trails - N/A	21%
Golf courses - Not urgent	44%
Golf courses - Somewhat urgent	6%
Golf courses - Urgent	2%
Golf courses - N/A	33%
Motorized boat launching ramps - Not urgent	38%
Motorized boat launching ramps - Somewhat urgent	14%
Motorized boat launching ramps - Urgent	6%
Motorized boat launching ramps - N/A	27%

11. Rate the level of the barriers that may limit citizens from visiting your parks or participating in your park programs.

	<b>Percentage Responding</b>
Lack of knowledge of available facilities - Major barrier	26%
Lack of knowledge of available facilities - Minor barrier	49%
Lack of knowledge of available facilities - Not a barrier	9%
Lack of knowledge of available facilities - N/A	0%
Lack of time - Major barrier	18%
Lack of time - Minor barrier	51%
Lack of time - Not a barrier	15%
Lack of time - N/A	1%
Not interested - Major barrier	17%
Not interested - Minor barrier	46%
Not interested - Not a barrier	18%
Not interested - N/A	3%
Poor health - Major barrier	17%
Poor health - Minor barrier	48%
Poor health - Not a barrier	14%
Poor health - N/A	3%
Lack of access to transportation - Major barrier	22%
Lack of access to transportation - Minor barrier	42%
Lack of access to transportation - Not a barrier	17%
Lack of access to transportation - N/A	2%

	<b>Percentage Responding</b>
Lack of accessible facilities - Major barrier	13%
Lack of accessible facilities - Minor barrier	39%
Lack of accessible facilities - Not a barrier	30%
Lack of accessible facilities - N/A	1%
Travel distance - Major barrier	19%
Travel distance - Minor barrier	37%
Travel distance - Not a barrier	25%
Travel distance - N/A	2%
Cost of travel - Major barrier	15%
Cost of travel - Minor barrier	43%
Cost of travel - Not a barrier	22%
Cost of travel - N/A	4%
Anxiety about being in the outdoors with limited knowledge/skills - Major barrier	8%
Anxiety about being in the outdoors with limited knowledge/skills - Minor barrier	41%
Anxiety about being in the outdoors with limited knowledge/skills - Not a barrier	31%
Anxiety about being in the outdoors with limited knowledge/skills - N/A	5%
Lack of security - Major barrier	3%
Lack of security - Minor barrier	30%
Lack of security - Not a barrier	49%
Lack of security - N/A	1%
Poor maintenance - Major barrier	5%
Poor maintenance - Minor barrier	13%
Poor maintenance - Not a barrier	64%
Poor maintenance - N/A	1%
High user fees - Major barrier	3%
High user fees - Minor barrier	14%
High user fees - Not a barrier	62%
High user fees - N/A	4%
Alcohol and drug use in parks - Major barrier	2%
Alcohol and drug use in parks - Minor barrier	18%
Alcohol and drug use in parks - Not a barrier	58%
Alcohol and drug use in parks - N/A	4%
Discrimination - Major barrier	1%
Discrimination - Minor barrier	5%
Discrimination - Not a barrier	71%
Discrimination - N/A	6%

## **Appendix E**

# **Open Project Selection Process**



# **NORTH CAROLINA'S OPEN PROJECT SELECTION PROCESS (OPSP)**

## **Introduction**

The State of North Carolina offers federal Land and Water Conservation Fund (LWCF) assistance for land acquisition and the development/renovation of outdoor recreational facilities through an open and competitive grant process known as the Open Project Selection Process (OPSP). Information on North Carolina's OPSP is provided for the benefit of the general public and potential local and state applicants. On behalf of the North Carolina Department of Environment and Natural Resources (DENR), the Division of Parks and Recreation (DPR) administer the LWCF grant program for the state.

The LWCF State Side Assistance Program was established by the LWCF Act of 1965 (Section 6, as amended; Public Law 88-578; U.S.C. 4601-4 et seq.) to stimulate a nationwide action program to assist in preserving, developing, and assuring all citizens of the United States, in present and future generations, such quality and quantity of outdoor recreation resources as may be available and are necessary and desirable for individual active participation.

A requirement for States to maintain their eligibility to receive LWCF monies is the completion of an approved Statewide Comprehensive Outdoor Recreation Plan (SCORP) and the OPSP once every five years. North Carolina's OPSP was developed in accordance with the National Park Service (NPS) requirements cited in the OPSP chapter of the LWCF Federal Financial Assistance Manual, October 1, 2008.

The state's annual LWCF apportionment is used as 50:50 matching grants for eligible state park projects and/or for eligible local government projects. Eligible local applicants include counties, towns, cities, villages and public authorities with legal authority to provide public recreation. Federally recognized Native American tribes also are eligible as a local government.

The administration of North Carolina's program, including the selection criteria and rating process is the focus of this document. The rating system was developed to process state and local acquisition and development projects to ensure that the selection of competing projects for funding is fair and equitable.

The current OPSP consists of the following seven components required by the National Park Service (NPS). These components are identified and explained in the following sections:

- 1) Priority Rating Systems,
- 2) Project Selection Process,
- 3) Recurring Funding Cycle,
- 4) Public Notification,
- 5) Program Technical Assistance,
- 6) Public Participation, and
- 7) Funding Distribution



## **Priority Rating System**

North Carolina's priority rating system is based on a point system which is used to rank projects according to specified criteria. The criteria are used to evaluate the project need, applicant compliance history, site and project quality and alignment with the current SCORP goals.

The state has two OPSP priority rating systems: one for local projects and one for state park projects.

## **Project Selection Process**

Submitted applications (local and state parks) will be scored using published scoring criteria. The scoring criteria favor a project's direct linkage to identified SCORP goals and initiatives. Additional scoring categories for local projects will include, but are not limited to: the provision of new and/or renovated outdoor recreation facilities, local planning efforts, public participation at the project sponsor level, needy local applicants, site consideration, clientele served, accessibility of the proposed project, ability of the sponsor to operate and maintain the project after development and/or acquisition and previous grant administration compliance.

The total score awarded to each local and/or state park project will determine rankings. Projects with the highest total scores that fall within the available LWCF funds will be recommended for funding first. If the last project on the list can only be partially funded, the SLO will ask the project sponsor(s) if they are willing to increase their percentage of project match to complete the project as proposed within the available funds. If the project sponsor does not wish to reduce their project's LWCF amount, then the project is removed from the lists of projects recommended for funding that year. The project ranked next on the list shall be selected and subjected to the same process. The process will be repeated until a project is found for which the available funds can be used. All projects that are not funded may reapply the next time that local projects are eligible for funding consideration.

## **Recurring Funding Cycle**

North Carolina's LWCF Grants Program is administered on an annual cycle.

## **Public Notification**

The funding cycle begins each year upon when the Secretary of the Interior issues the notice of apportionment to the governor. This notification identifies the amount of funds which will be made available to North Carolina for the LWCF grant program. Upon notification, DPR solicits applications for proposed projects from political subdivisions across the state, including Native American tribal governments, and state parks through email notification and on the Division's website.

The Division maintains a comprehensive mailing and email list of all potentially eligible applicants. This list includes names and addresses of political subdivisions and parks and recreation directors throughout the state who have jurisdictional responsibility for recreation, or who may have a related interest in public recreational development. Included on this list are the names of special interest groups, professional and community organizations, and others who have expressed an interest in the LWCF program.

Anyone interested in the LWCF program in North Carolina may find the information posted on the Division of Parks and Recreation's website. The announcements include the application schedule, deadline, and anticipated date of notification of approved or selected projects. The application and other required documents as well as program information can be assessed and downloaded from DPR's website. A hard copy can be requested as well.

The following funding schedule dates are approximate for projects. The schedule was developed based on the assumption that the state will be notified of its annual apportionment by March of each year. If notification is received later, the schedule may be delayed accordingly.

August 1 – Public notification of the grant cycle.

January 31 – Deadline for the submission of current federal fiscal year applications to DPR.

February/March – Applications are reviewed, evaluated and rated per the state's LWCF Priority Rating System. The Recreation Resources Service (RRS) at North Carolina State University conducts pre-award inspections of each project site. On behalf of DPR, RRS provides field administration for the LWCF and NC Parks and Recreation Trust Fund (PARTF) programs. DPR's grant staff and RRS consultants rate all applications and submit the ranked listing to the State Liaison Officer (SLO) and Alternate State Liaison Officer (ASLO) for funding consideration.

August 15 – State Liaison Officer's recommended projects are submitted to Southeast Regional Office of NPS for review, approval and execution of project agreements. For local projects, DENR project agreements are initiated after NPS approval is attained.

This schedule allows the State to submit its selected projects to NPS in time for federal approval and obligation of funds prior to the end of the federal fiscal year, September 30.

### **Program Technical Assistance**

DPR provides outreach and technical assistance to potential local LWCF applicants through regional RRS consultants and through DPR and RRS's websites. DPR and RRS makes every effort possible to answer questions regarding application procedures, the proper completion of an application, and the criteria used for project selection and grant awards. Site visits with the

applicant will occur prior to the scoring and rating of projects to better understand the project and the site's environmental suitability for the proposed project.

DPR's grants staff will provide outreach and technical assistance to potential state park LWCF applicants as requested. Also, grant staff will conduct site visits with state park applicants prior to the scoring and rating of projects.

### **Public Participation**

Federal guidelines require that the state's SCORP and OPSP include opportunities for public participation before implementation of the new program criteria. Public participation is required to assure that the preparation and revision of the selection process and rating systems are based on citizen involvement and public participation. In North Carolina, public involvement in determining the SCORP goals and the selection process was made in several ways.

Public participation throughout the SCORP planning process was instrumental in determining the major outdoor recreation issues which are a significant part of the selection process and rating system for state and local projects. All document/press releases were posted on DPR's website. In addition, two separate surveys (general public and recreation providers) were used to ensure public participation and input into the development of the state's SCORP goals and initiatives, and therefore, the associated scoring system's criteria. Several presentations were made at conferences throughout the process including the North Carolina Recreation and Park Association's annual conference, Municipal and County Recreation Director's Conference, and the first ever North Carolina State Trails Conference. Information about the LWCF program and SCORP was made available at the NC League of Municipalities and NC Association of County Commissioner's conferences.

# Project Evaluation Criteria for Local Governments



State of North Carolina

Department of Environment and Natural Resources

February 2015

## Scoring Summary

	Points Awarded by Type of Project		
Category	Acquiring Land	Developing Recreation Facilities	Both Land and Facilities
Planning	10	20	20
Public Involvement	15	15	15
Recreation Facilities	0	55	55
Site Considerations	5	5	5
Operation and Maintenance	15	15	15
Land Acquisition	15	0	15
Clientele Served	0	5	5
Past LWCF per Capita Funding	10	10	10
Consistency with the NC Outdoor Recreation Plan	20	50	50
Total Possible Points	90	175	190
Bonus: plus or minus 12 points for projects involving factors including partnerships, interconnected trail networks, access to public waters, as well as the quality of previous projects			

## LWCF Scoring System for Local Grants

Please provide all of the information requested for each item. Attach a separate page if more space is needed to address any item. Before beginning, please refer to the Definitions Section (page 10-13). A team of LWCF staff and regional consultants will evaluate each application based on the scoring system and make the final decision about the applicant's score.

<b>Applicant:</b>
<b>Project:</b>

### A. Planning: (20 possible points)

#### 1. Master Plan for the park and/or greenway system (10 points)

(Not applicable for projects proposing land acquisition only)

- a. ☐ The applicant has a master plan created or revised within the past five years for the project site and the project conforms to the plan.

Date the plan was produced: \_\_\_\_\_ (9 points)

**or**

- b. ☐ The applicant has a master plan created or revised within the past six years to ten years for the project site and the project conforms to the plan.

Date the plan was produced: \_\_\_\_\_ (4 points)

- c. ☐ The local governing board has adopted the master plan.

Date the plan was adopted/accepted: \_\_\_\_\_ (1 point)

#### Documentation Required:

- Three copies of the park master plan or greenway system plan.
- Three copies of the local governing board's meeting minutes or resolution as documentation of the adoption or acceptance.
- List the page number(s) and tab or highlight where the project is referenced in the plan.

#### 2. Comprehensive systemwide parks and recreation plan for the local government's jurisdiction (7 points)

- a. ☐ The applicant has a Comprehensive Systemwide Parks and Recreation Plan produced or revised in the past 10 years and the project conforms to the plan.

Date the plan was produced: \_\_\_\_\_ (6 points)

- b. ☐ The local governing board has adopted the systemwide plan.

Date the plan was adopted/accepted: \_\_\_\_\_ (1 point)

#### Documentation Required:

- Three copies of the comprehensive systemwide parks and recreation plan.
- Three copies of the local governing board's meeting minutes or resolution as documentation of the official adoption or acceptance.
- List the page number(s) and tab or highlight where the project is referenced in the plan.

**3. 3-5 year capital improvement plan for parks and recreation (3 points)**

- ☐ The applicant has a 3-5 year parks and recreation plan or a capital improvements plan for parks and recreation and the project is identified in the plan.

Date the plan was adopted/accepted: \_\_\_\_\_ (3 points)

**Documentation Required:**

- Three copies of the capital improvement plan.
- Three copies of the local governing board's meeting minutes or resolution as documentation of their adoption or acceptance as a part of the local government's budget process.
- List the page number(s) and tab or highlight where the project is referenced in the plan.

**B. Level of public involvement in developing and supporting the project: (15 possible points)**

**1. Public meetings (5 points):**

- ☐ The applicant conducted a public meeting(s) exclusively for discussing the project and obtaining comments. The public supported the project.

Date of the meeting(s): \_\_\_\_\_

**Documentation Required:**

- Provide a title page that gives the name of applicant, the name of the project and identifies the document as "Public Meetings."
- Three copies of the newspaper advertisement or a document describing the other means used to widely advertise the meeting.
- Three copies of the minutes, including the discussion of the project, who was present and public comments.

**2. Recreational needs survey (5 points):**

- ☐ The results of a survey to determine the recreational needs in the applicant's jurisdiction show that the citizens support the project. The survey was conducted during the past ten years.

**Documentation Required:**

- A title page that gives the name of applicant, the name of the project and identifies the document as "Survey of Recreational Needs."
- Questionnaire
- Results of the survey
- Describe how the survey was distributed. Give the date(s) of distribution and the number of surveys distributed. Include a description of the respondents to insure that there are enough and that they are representative of the population in the local government's jurisdiction.
- Describe how the results of the survey show that the citizens support the project.



**3. Support from civic (non-governmental) groups (3 points):**

- ☐ The applicant presented the project to two or more local groups (Example: civic groups, neighborhood associations, youth organizations, advisory boards, etc.) and received support for the project.

**Documentation Required:**

- Include a title page that gives the applicant's name, the project's name and identifies the document as "Presentations to Local Groups."
- Three (3) copies of the agenda, minutes or other documentation from the groups that confirm the dates of the meetings and the presentations given by the applicant.
- *Note: support letters do not count as presentations.*

Name of the Organization	Date of the Presentation	Meeting agenda or letter from the organization included in the application?

**4. Support from a parks and recreation board (2 points):**

- ☐ The applicant presented the project to the parks and recreation advisory board or a similarly appointed group and received a motion of support for the project.

Date of the meeting(s): \_\_\_\_\_

**Documentation Required:**

- Include a title page that gives the name of the applicant, the project and identifies the document as "Presentation to Advisory Board."
- Three copies of the minutes from the meeting that include support for the project.

**C. Public recreational facilities provided by the project: (55 possible points)**  
(Does not apply for applications proposing land acquisition only.)

**1. The local government will be building its first public park on property that it owns. (20 points)**

☐ Yes ☐ No

**Explain:**

**2. New, like or renovated facilities to be provided: (Maximum 30 points for the sum of 2a, 2b and 2c.)**

a. The project will provide (check one):

- ☐ 3 or more types of new recreational facilities (20 points)
- ☐ 2 types of new recreational facilities (15 points)
- ☐ 1 type of new recreational facility (10 points)

**List the new types of recreational facilities:**

b. The project will add recreational facilities at the park that are like the facilities that exist at the park. The project will add (check one):

- ☐ 3 or more types of recreational facilities (12 points)
- ☐ 2 types of recreational facilities (8 points)
- ☐ 1 type of recreational facility (4 points)

**List the types of recreational facilities:**

c. The project will provide major renovation of (check one):

- ☐ 3 or more types of recreational facilities (8 points)
- ☐ 2 types of recreational facilities (6 points)
- ☐ 1 type of recreational facility (4 points)

**List the recreational facilities to be renovated and why each renovation is needed:**

**3. The project will provide a trail or greenway (1/4 mile or longer) that links to existing recreation area(s), school(s), downtown businesses, and/or communities located outside of the park. (5 points)**

☐ Yes      ☐ No

**Site plan must show trail linkage. Also, please identify by name and location the existing trail and areas to be linked by the proposed trail:**

**D. The suitability of the site for the proposed project. (5 possible points)**

1. ☐ The site is suited for the proposed development with minimal adverse impact to the environment. (1 point)
2. ☐ The location of the site enhances the park and the public's access to the park. Describe how the location of the site will enhance the park and the public's access to the park. (1 point)
3. ☐ The site is enhanced by the adjacent property uses. Describe the uses of the adjacent property and how they will enhance the park. (1 point)
4. ☐ The proposed site is large enough to adequately accommodate the proposed development. The proposed project will require minimal site preparation considering the geographic region where it is located. (1 point)
5. ☐ The site is free of restrictive easements, overhead power lines, or other intrusions that would limit the proposed development or cause a safety hazard for users. (1 point)

**To be awarded these points, the applicant must adequately describe why the proposed project meets each of the five criteria. For land acquisition only projects, base comments on the proposed plan for developing the site after completing the LWCF project.**

**E. The applicant's commitment to operating and maintaining the project. (15 possible points)**

1. ☐ The applicant has a full-time parks and recreation department that will manage the project site to provide programming and to ensure adequate operation and maintenance. (15 points)
2. ☐ The applicant has a full-time staff, such as a public works, who will manage the project site to ensure adequate operation and maintenance. (8 points)
3. ☐ The applicant will manage the project site with part-time staff or by contractual agreement to ensure adequate operation and maintenance. (4 points)
4. ☐ An organized volunteer group, such as a civic group or youth sports association will operate and maintain the site. (2 points)

**Provide the name of the organization that will operate and maintain the site:**

**If the applicant is not going to operate the site with full-time staff, (see # 3 & #4), describe how and when the site will be open to the general public.**

**F. Land acquisition (15 possible points)**

1. ☐ If not purchased at this time, a significant natural, cultural, recreational, scenic or highly-threatened resource will be used for other purposes. (15 points)
2. ☐ The site is an excellent natural and/or recreational resource. (10 points)
3. ☐ The site is an average natural and/or recreational resource. (5 points)

**Describe in detail why the site's resources should receive 5, 10, or 15 points:**

Not applicable for projects proposing facility development only.

**G. Clientele served and accessibility (5 possible points)**

1. ☐ Proposed project is designed primarily for use by persons with disabilities. (3 points)
2. ☐ Proposed project will renovate existing facility(s) to make them accessible to persons with disabilities. (2 points)

Not applicable for projects proposing land acquisition only.

**H. Previous LWCF funding (10 possible points – refer to per capita funding ranking on page E - 20)**

1. Level of local LWCF funding per capita by county (10 possible points)

County rank (from high to low) per capita LWCF funding	Points Awarded
1 - 10	1
11 - 20	2
21-30	3
31-40	4
41-50	5
51-60	6
61-70	7
71-80	8
81-90	9
91 – 100	10

**I. Consistency with SCORP priorities – Geographic distribution, public preferences for recreation activities, contribution to SCORP goals and objectives, and recreation facility needs identified by recreation managers. (50 possible points)**

1. ☐ Geographic distribution – Refer to the list of counties ranked by current supply of outdoor recreation resources on page E – 21 & 22 (15 points)

<b>County rank (from high to low) based on residents per facility or local park acres</b>	<b>Points Awarded</b>
1 - 10	1.5
11 - 20	3
21-30	4.5
31-40	6
41-50 (or facility not listed)	7.5
51-60	9
61-70	10.5
71-80	12
81-90	13.5
91 – 100	15

**Facility groups:**

Athletic fields include baseball, softball, football, soccer, and multi-purpose fields.

Athletic courts include basketball courts, tennis courts, and volleyball courts.

Trail miles include all types of trails.

For acquisition projects, refer to the local park acreage listing.

Applications proposing several types of facilities with different points awarded will be averaged.

2. ☐ Public preferences - Comparing LWCF Applications based on the public preferences for recreation. See the list of recreational activities ranked by public participation on page E - 23. (15 points)

<b>Activity rank (from high to low) based on percentage of the public participating</b>	<b>Points Awarded</b>
Highest ranked group	15
2 <sup>nd</sup> ranked group	13.5
3 <sup>rd</sup> ranked group	12
4 <sup>th</sup> ranked group	10.5
5 <sup>th</sup> group (or activity not listed)	9
6 <sup>th</sup> group	7.5
7 <sup>th</sup> group	6
8 <sup>th</sup> group	4.5
9 <sup>th</sup> group	3
10 <sup>th</sup> group	1.5

Applications proposing several types of activities with different points awarded will be averaged.

Not applicable for projects proposing land acquisition only.

3. Contribution to SCORP goals, objectives and initiatives (5 points)

<b>Number of Objectives Addressed</b>	<b>Points Awarded</b>
Five or Six	5
Four	4
Three	3
Two	2
One	1

Objective # 1: Meet the needs of North Carolina's rapidly growing population by maintaining and enhancing its outdoor recreation resources;

Objective # 2: Support improvements in public health and fitness by increasing opportunities for physical activity;

Objective # 3: Improve the visibility of and public access to public recreation areas and foster cooperation between public recreation managers;

Objective # 4: Promote the economic advantages of the state's recreation opportunities for communities across North Carolina;

Objective # 5: Promote and conserve North Carolina's vast and high quality natural resources and landscapes;

Objective # 6: Increase public awareness of the state's natural resources and outdoor recreation opportunities, to include the significance of conservation, through interpretation, education and outreach.

4. ☐ Recreation facility needs identified by recreation managers in North Carolina. Refer to the list of recreation facilities ranked as most urgently needed on page E - 24 (15 points)

<b>Recreation facilities and areas ranked (from high to low) based on priorities identified by recreation managers</b>	<b>Points Awarded</b>
Highest ranked group	15
2 <sup>nd</sup> ranked group	10
3 <sup>rd</sup> ranked group	5
4 <sup>th</sup> group (or activity not listed)	2

Applications proposing several types of activities with different points awarded will be averaged.

Not applicable for projects proposing land acquisition only.

**J. Other positive or negative factors: (+ 12 or – 12 possible points)**

**1. Positive Features ( + 12 points possible)**

- a. ☐ Application is a joint project between two or more units of government or the project is identified in a multi-jurisdictional parks and recreation plan adopted by the applicant(s). (+3 points)
- b. ☐ Application is for an interconnected trail that links to an existing recreation area(s), school(s), businesses and/or communities located outside of the project site. (+2 points)
- c. ☐ Project proposes new recreational facility to provide public access to public waters (such as river, ocean, sound, or lake). (+2 points)
- d. ☐ Applicant has: developed quality outdoor recreation facilities and they are well maintained for public use.

or

Applicant has satisfactorily completed and complied with grant compliance guidelines on previous LWCF and/or PARTF projects. (+ 5 points)

**2. Negative Feature(s) ( - 12 points possible)**

- a. ☐ Applicant has an active LWCF or PARTF grant (- 2 points)
- b. ☐ Poor application documentation (poor maps/site plan, instructions not followed, missing documentation, unrealistic budget, inconsistencies, etc.) (-3 points)
- c. ☐ Over half of the project's cost is for site preparation and/or support facilities (such as restrooms, roads, utilities, dredging, landscaping, etc.) (-2 points)
- d. ☐ Applicant has history of poor quality and/or substandard maintenance and operation of their outdoor recreation facilities.

or

Below average compliance with grant guidelines and/or currently has an outstanding compliance problem with an existing or previous project. (-5 points)



## Definitions Section

1. **Recreational Facility:** The following list provides examples of projects that will qualify as new types of recreational facilities or areas.

- A. **Examples of Recreational Facilities and Areas:**

- Sports facilities including tennis courts, soccer fields, ballfields, running tracks, volleyball courts and basketball courts.
- Swimming facilities including swimming pools, spraygrounds, wave-making pools, wading pools, and swim beaches.
- Trails within a park with a minimum continuous length of 1/4 mile including nature trails, hiking trails, bicycling trails, parcours, and equestrian trails.
- Greenways - linear open spaces connecting parks or other public areas that are 1/4 mile or longer and usually contain a multi-purpose trail.
- Camping facilities including cabins, group camps, and tent and trailer campgrounds.
- Picnic facilities including picnic shelters with tables and grills, or picnic areas with groups of tables, grills and trash receptacles.
- Interpretive facilities for nature study, viewing scenery and photography including observation decks, viewing platforms, boardwalks. May also include benches and interpretive signs.
- Playgrounds (for children ages 6-12) and tot lots (for children ages 2-5).
- Amphitheaters.
- Fishing and boating facilities including man-made lakes or ponds, docks, launching ramps, piers, and marinas.
- Large designated open areas with landscaping, benches, and walkways intended for recreational activities such as sunbathing, relaxing with family and friends, informal picnics and games.

- B. **Support facilities** are **not** recreational facilities: Support facilities include parking lots, roads, lighting, bleachers, restrooms, concession buildings, fencing, landscaping, site preparation, bridges, utilities, sidewalks, stairways, drinking fountains, and maintenance buildings. Recreational programs, such as sports activities, classes or lessons, are not facilities.

2. **Renovation:** The extensive reconstruction of a facility to restore or improve its usefulness to its original purpose. A renovation project will not be awarded points under the scoring system if the facility's deterioration is due to inadequate maintenance during its reasonable lifetime. Renovating a recreational or non-recreational facility for a new recreation use would apply to new and/or like recreational facilities.

### 3. Master Plan for the Park or Greenway System

**Master Plan for the Park:** A long-range plan for one park that contains a site analysis; a description of the community's recreational needs; property acquisition boundaries; and the proposed location of all capital improvements. A master plan document must adequately address all of the following items:

- Site analysis - Describe and evaluate the site's natural, historic, and man-made features. These include items such as topography, soils, vegetation, hydrology, significant natural communities, wetlands, existing structures, and public access.
- Recreational needs - Identify the recreational opportunities that the public prefers using meetings or a survey. Describe how the recreational opportunities being proposed by the master plan relate to existing recreational facilities and services in the jurisdiction (this may be a part of the system-wide comprehensive plan).
- Program description - Identify the main purposes of the park including a description of the how the local government will design the park to be used by the public.
- Physical needs - Identify the physical needs of the park's site. Include any land the local government will acquire and any capital improvements (buildings, recreation facilities, roads, utilities). All land and capital improvements proposed in the PARTF application must be included in the master plan.
- Project costs for property acquisition and capital improvements, divided into phases if necessary. The cost information can be provided in a separate document that is submitted with the master plan.
- Site plans and illustrations depicting the boundaries of land to be acquired and the location of facilities.
- Public Involvement - Describe how the local government involved a broad range of the citizens in its jurisdiction as the master plan was being developed. Examples include public meetings or advisory committee meetings. This description can also be provided in a separate document that is submitted with the master plan.

**Greenway System Plan** - A long-range plan to develop a framework for building an integrated system of trails that will link citizens to the outdoors. A greenway system plan must adequately address all the following items:

- Vision, Goals and Objectives - The goals and objectives the local government would like the plan to accomplish related to the different uses/benefits of the greenway, especially in reference to recreation/fitness/health.
- Inventory Existing Data and Related Plans – the identification and mapping of existing natural resources, man-made features and linear greenway corridors within the local jurisdiction that might influence the development of the greenway system.
- Analyze Data and Develop/Map Proposed Greenway – review and analysis of all data collected to allow the local government to:
  - Identify potential greenway corridors,
  - Identify hubs/destinations that are either natural resource based or man-made (or a combination of the two) which should be part of the greenway system,
  - Identify important and threatened open space that should be part of the greenway system including ecologically or biologically significant areas or hubs,
  - Identify and discuss greenway development challenges such as floodways, active railroad tracks/crossings, major roadway crossings, etc.

- Mapping - the result of the above analysis is a map(s) and text to describe the proposed system. The map(s) should illustrate not only existing greenway system elements, but also the proposed greenway network envisioned by the local government.
  - Action Plan – develop a specific action plan that will position the local government to move forward in realizing the proposed greenway system. The action plan should include:
    - A listing of action steps that set priorities,
    - Roles and responsibilities in implementing the plan,
    - Cost estimates, resources and potential funding options needed to address action steps, and
    - Greenway corridor segments identified as potential pilot projects.
  - Public Involvement - A description of how the local government involved a broad range and representative number of its citizens as the greenway plan was prepared. Examples include a random survey of the citizens; a series of public meetings that would give most citizens an opportunity to participate; a series of focus group meetings that involve the representatives of the jurisdiction's population; or a combination of these efforts. Please address the number of people who participated and who they represented for each level of public involvement used.
  - Maintenance, Management and Operational Policies – address policies that will provide the basis for making decisions related to trail maintenance, management and security.
  - The cost information and description of public involvement can be provided in a separate document that is submitted with the greenway plan.
4. **Comprehensive Systemwide Plan for Parks and Recreation:** A long-term plan that describes how a local government will address the recreational needs of the citizens in its jurisdiction. A systemwide plan document must adequately address all of the following items:
- Produced or revised within the past ten years.
  - A description of the jurisdiction's residents and their preferences for recreational activities and facilities.
  - An evaluation of existing recreational facilities and park land such as local and state parks, school facilities, the Y, churches, private sector, etc. to determine if the community's current and future recreational needs are being met.
  - An estimate of the park land to be acquired and the recreational facilities to be developed to address shortfalls in current services.
  - A detailed description of how the local government involved a broad range and representative number of its citizens as the plan was prepared.
    - Examples include a random survey of the citizens; a series of public meetings that would give most citizens an opportunity to participate; a series of focus group meetings that involve the representatives of the jurisdiction's population; or a combination of these efforts.
    - This description may be provided in a separate document if it is not included in the plan. Please address the number of people who participated and who they represented.
5. **Capital Improvement Plan / Three-to-Five Year Park and Recreation Plan:** A plan that lists all of the capital expenditures, and / or specifically all park and recreation projects, that a local government has approved for funding and scheduled for the near future. The plan is a component of the local government's regular budget cycle.

6. **Survey of Recreational Needs:** A survey of the citizens in the local government's jurisdiction to identify their needs and preferences for recreational opportunities. The local government can use the survey as one of the first steps in developing a master plan for a specific park or a system wide comprehensive park and recreation plan for the entire jurisdiction. Through the survey, citizens can give their preferences for different *types of* recreation and facilities. The local government uses the survey's results to establish recreational priorities for the jurisdiction.

The local government must distribute the questionnaire to a broad and representative sample of its citizens. The questionnaire can be distributed through the mail, door-to-door, person-to-person, by telephone, in focus groups and in public meetings.

The following key elements of the survey must be documented:

1. The survey should be distributed to a sample of citizens that is sufficiently large and varied enough to be representative of the population in the jurisdiction. A random sample of the population is preferred.
2. The number of respondents should be sufficiently large enough to adequately represent the population of the jurisdiction.
3. The questions must be clear and unbiased.
4. The questions should not limit the citizens to choosing from a narrow list of recreational opportunities.
5. Copies of the same questionnaire must be distributed to everyone in the sample.
6. The results should include some demographics of the respondents to ensure that they are representative of the population in the jurisdiction.
7. The survey must have been conducted within the past ten years.
8. The survey must be conducted and results received before the local government begins planning the PARTF project.

**Table for Item H - Level of Local LWCF Spending Per Capita by County**

Rank	County	LWCF Assistance	2015 Population	LWCF per Capita	Rank	County	LWCF Assistance	2015 Population	LWCF per Capita
33	Alamance	1,103,154	154,511	\$ 7.14	71	Johnston	613,254	182,547	\$ 3.36
26	Alexander	313,223	37,268	\$ 8.40	93	Jones	13,508	10,439	\$ 1.29
7	Alleghany	176,398	11,114	\$ 15.87	23	Lee	527,442	61,618	\$ 8.56
32	Anson	191,455	26,688	\$ 7.17	51	Lenoir	299,186	59,110	\$ 5.06
24	Ashe	234,103	27,399	\$ 8.54	76	Lincoln	240,022	80,980	\$ 2.96
12	Avery	220,207	17,833	\$ 12.35	11	Macon	445,588	34,095	\$ 13.07
85	Beaufort	108,482	47,780	\$ 2.27	22	Madison	182,752	21,320	\$ 8.57
89	Bertie	44,332	20,734	\$ 2.14	5	Martin	403,585	23,607	\$ 17.10
38	Bladen	230,939	35,317	\$ 6.54	21	McDowell	402,585	45,258	\$ 8.90
82	Brunswick	313,645	122,340	\$ 2.56	70	Mecklenburg	3,469,612	1,030,572	\$ 3.37
67	Buncombe	988,663	254,358	\$ 3.89	2	Mitchell	365,354	15,408	\$ 23.71
27	Burke	724,926	89,300	\$ 8.12	6	Montgomery	453,361	27,742	\$ 16.34
65	Cabarrus	787,009	192,847	\$ 4.08	46	Moore	554,646	93,963	\$ 5.90
14	Caldwell	934,429	82,502	\$ 11.33	43	Nash	569,395	94,197	\$ 6.04
18	Camden	95,633	10,166	\$ 9.41	87	New Hanover	492,379	222,168	\$ 2.22
9	Carteret	1,002,465	70,812	\$ 14.16	72	Northampton	66,996	20,738	\$ 3.23
17	Caswell	223,133	23,718	\$ 9.41	39	Onslow	1,277,952	197,791	\$ 6.46
60	Catawba	675,138	155,200	\$ 4.35	45	Orange	854,690	142,687	\$ 5.99
88	Chatham	150,345	69,530	\$ 2.16	28	Pamlico	104,048	13,108	\$ 7.94
13	Cherokee	320,329	27,253	\$ 11.75	59	Pasquotank	174,096	39,445	\$ 4.41
15	Chowan	160,009	14,919	\$ 10.73	95	Pender	27,150	57,680	\$ 0.47
97	Clay	-	10,584	\$ -	80	Perquimans	39,779	14,176	\$ 2.81
69	Cleveland	332,702	97,274	\$ 3.42	68	Person	139,592	39,459	\$ 3.54
62	Columbus	247,000	57,738	\$ 4.28	74	Pitt	551,440	176,109	\$ 3.13
78	Craven	314,775	107,919	\$ 2.92	34	Polk	138,415	20,761	\$ 6.67
86	Cumberland	745,699	332,568	\$ 2.24	31	Randolph	1,036,779	142,400	\$ 7.28
92	Currituck	35,465	23,802	\$ 1.49	4	Richmond	807,366	46,253	\$ 17.46
10	Dare	465,130	35,360	\$ 13.15	48	Robeson	723,802	132,732	\$ 5.45
81	Davidson	445,789	164,557	\$ 2.71	53	Rockingham	453,295	91,872	\$ 4.93
63	Davie	178,723	41,806	\$ 4.28	19	Rowan	1,312,095	140,170	\$ 9.36
56	Duplin	277,673	60,462	\$ 4.59	83	Rutherford	169,440	67,177	\$ 2.52
58	Durham	1,322,481	296,452	\$ 4.46	29	Sampson	479,692	64,644	\$ 7.42
3	Edgecombe	1,036,516	55,744	\$ 18.59	8	Scotland	555,400	35,720	\$ 15.55
37	Forsyth	2,398,714	363,817	\$ 6.59	16	Stanly	646,645	61,339	\$ 10.54
84	Franklin	150,346	64,207	\$ 2.34	41	Stokes	290,411	46,144	\$ 6.29
52	Gaston	1,053,671	212,868	\$ 4.95	40	Surry	468,409	73,521	\$ 6.37
98	Gates	-	11,430	\$ -	1	Swain	433,771	14,829	\$ 29.25
75	Graham	27,227	9,112	\$ 2.99	20	Transylvania	308,604	33,845	\$ 9.12
35	Granville	384,781	58,046	\$ 6.63	47	Tyrrell	24,008	4,180	\$ 5.74
36	Greene	140,212	21,211	\$ 6.61	79	Union	624,168	220,792	\$ 2.83
44	Guilford	3,103,164	517,284	\$ 6.00	90	Vance	87,566	45,022	\$ 1.94
49	Halifax	272,793	53,102	\$ 5.14	66	Wake	4,068,305	1,003,596	\$ 4.05
57	Harnett	576,571	126,886	\$ 4.54	100	Warren	-	20,458	\$ -
30	Haywood	446,442	60,334	\$ 7.40	77	Washington	37,730	12,792	\$ 2.95
64	Henderson	472,440	111,147	\$ 4.25	42	Watauga	328,019	52,816	\$ 6.21
91	Hertford	47,046	24,445	\$ 1.92	94	Wayne	133,408	125,800	\$ 1.06
96	Hoke	20,510	52,666	\$ 0.39	73	Wilkes	222,242	69,709	\$ 3.19
99	Hyde	-	5,934	\$ -	54	Wilson	411,299	84,553	\$ 4.86
50	Iredell	869,753	169,431	\$ 5.13	55	Yadkin	179,813	37,953	\$ 4.74
25	Jackson	346,835	41,031	\$ 8.45	61	Yancey	77,608	17,937	\$ 4.33

County2015 Population		Table for Item I.1 - NC Counties Ranked by Current Supply of Recreation Resources											
		residents/ athletic field		residents/ athletic court		residents/ picnic shelter		residents / playground		residents / trail mile		residents / local park acre	
		Rank		Rank		Rank		Rank		Rank		Rank	
Alamance	154,511	32	1,776	41	2,664	14	3030	35	4682	49	3055	8	65
Alexander	37,268	50	2,070	99	18,634	97	0	34	4659	96	74536	84	490
Alleghany	11,114	99	11,114	2	1,111	27	3705	48	5557	8	191	32	150
Anson	26,688	9	988	78	4,448	19	3336	28	4448	29	1061	26	115
Ashe	27,399	53	2,108	80	4,566	47	5480	31	4566	57	4183	63	269
Avery	17,833	10	991	39	2,548	58	5944	56	5944	7	188	57	241
Beaufort	47,780	40	1,911	71	3,982	71	7963	58	5973	44	2459	59	244
Bertie	20,734	29	1,728	85	5,184	80	10367	81	10367	97	0	92	768
Bladen	35,317	63	2,523	69	3,924	56	5886	27	4415	40	2185	69	304
Brunswick	122,340	37	1,854	29	2,308	13	2984	53	5826	35	1605	7	61
Buncombe	254,358	66	2,650	43	2,795	52	5652	59	6204	32	1306	15	89
Burke	89,300	17	1,191	28	2,290	9	2481	29	4465	23	564	22	107
Cabarrus	192,847	71	2,878	57	3,269	32	4018	61	6650	92	18543	53	224
Caldwell	82,502	13	1,130	11	1,587	10	2500	16	3300	27	777	17	92
Camden	10,166	64	2,541	84	5,083	98	0	80	10166	14	385	95	1452
Carteret	70,812	8	920	14	1,647	16	3079	18	3372	15	390	47	199
Caswell	23,718	97	7,906	93	7,906	95	23718	98	23718	98	0	96	1482
Catawba	155,200	69	2,723	34	2,463	26	3609	10	2771	58	4240	13	78
Chatham	69,530	49	2,045	65	3,659	78	9933	66	6953	34	1593	31	145
Cherokee	27,253	34	1,817	36	2,478	40	4542	93	13626	16	395	43	182
Chowan	14,919	15	1,148	1	622	68	7460	6	2487	25	746	68	298
Clay	10,584	19	1,323	88	5,292	85	10584	83	10584	2	123	50	216
Cleveland	97,274	61	2,432	53	3,040	61	6485	65	6948	42	2269	4	46
Columbus	57,738	11	1,050	12	1,604	2	1443	3	1991	46	2600	19	99
Craven	107,919	43	1,962	66	3,721	75	8993	51	5680	47	2765	51	220
Cumberland	332,568	56	2,160	59	3,464	87	10728	67	7076	87	12139	67	285
Currituck	23,802	35	1,831	70	3,967	5	2380	57	5950	48	2975	54	227
Dare	35,360	23	1,414	9	1,473	31	3929	2	1964	13	333	6	55
Davidson	164,557	89	4,571	68	3,918	53	5674	44	5485	77	8661	64	274
Davie	41,806	98	8,361	81	4,645	83	10451	96	20903	99	0	85	504
Duplin	60,462	59	2,325	46	2,879	60	6046	46	5497	84	10335	70	312
Durham	296,452	91	4,860	35	2,470	64	6588	42	5390	59	4387	61	251
Edgecombe	55,744	92	5,068	50	2,934	45	5068	86	11149	91	16395	58	242
Forsyth	363,817	77	3,567	19	1,828	39	4492	38	4984	71	6725	5	51
Franklin	64,207	79	3,777	98	16,052	86	10701	92	12841	85	10701	81	434
Gaston	212,868	22	1,382	22	1,851	29	3870	33	4628	63	5199	28	117
Gates	11,430	14	1,143	3	1,270	98	11430	87	11430	17	434	98	1633
Graham	9,112	57	2,278	18	1,822	15	3037	100	0	1	44	99	1822
Granville	58,046	38	1,872	87	5,277	38	4465	68	7256	78	8664	66	284
Greene	21,211	41	1,928	89	5,303	36	4242	41	5303	72	7070	90	643
Guilford	517,284	31	1,759	24	2,173	30	3889	15	3193	45	2595	2	41
Halifax	53,102	73	3,319	38	2,529	34	4085	55	5900	30	1193	80	402
Harnett	126,886	54	2,115	79	4,532	90	14098	88	11535	51	3134	18	95
Haywood	60,334	51	2,080	55	3,175	65	6704	69	7542	20	464	91	754
Henderson	111,147	83	3,970	77	4,446	74	8550	79	10104	33	1380	56	240
Hertford	24,445	68	2,716	60	3,492	23	3492	13	3056	86	11640	21	106
Hoke	52,666	94	5,852	97	13,167	93	17555	94	17555	54	3511	100	10533
Hyde	5,934	95	5,934	91	5,934	57	5934	11	2967	10	276	88	539
Iredell	169,431	20	1,366	76	4,344	42	4579	43	5466	50	3125	37	165
Jackson	41,031	60	2,414	49	2,931	28	3730	24	3730	12	312	1	33
Johnston	182,547	76	3,511	83	5,071	76	9127	72	7937	76	8022	83	469
Jones	10,439	75	3,480	95	10,439	82	10439	82	10439	100	0	97	1491

		Table for Item I.1 - NC Counties Ranked by Current Supply of Recreation Resources											
County	2015 Population	residents/ athletic field		residents/ athletic court		residents/ picnic shelter		residents / playground		residents / trail mile		residents / local park acre	
		Rank		Rank		Rank		Rank		Rank		Rank	
Lee	61,618	88	4,401	64	3,625	79	10270	70	7702	53	3201	40	172
Lenoir	59,110	18	1,285	20	1,847	72	8444	60	6568	94	26868	46	192
Lincoln	80,980	80	3,856	94	10,123	89	13497	75	8998	93	18833	48	209
Macon	34,095	4	631	17	1,794	37	4262	63	6819	4	147	44	184
Madison	21,320	96	7,107	33	2,369	67	7107	84	10660	6	169	93	790
Martin	23,607	26	1,574	15	1,686	70	7869	19	3372	82	9443	60	245
McDowell	45,258	39	1,886	82	5,029	92	15086	97	22629	21	546	79	397
Mecklenburg	1,030,572	78	3,734	47	2,903	48	5511	40	5285	80	8884	3	44
Mitchell	15,408	7	856	8	1,401	3	1541	8	2568	11	287	86	514
Montgomery	27,742	90	4,624	21	1,849	50	5548	47	5548	19	451	77	391
Moore	93,963	67	2,685	45	2,847	49	5527	36	4698	39	2046	25	114
Nash	94,197	33	1,777	4	1,273	20	3364	7	2546	95	31399	41	173
New Hanover	222,168	30	1,736	31	2,339	46	5419	54	5847	69	6258	30	133
Northampton	20,738	85	4,148	74	4,148	81	10369	64	6913	55	3988	94	988
Onslow	197,791	87	4,395	72	4,037	77	9419	85	10988	64	5257	87	526
Orange	142,687	65	2,548	26	2,229	62	6486	45	5488	41	2216	11	74
Pamlico	13,108	6	819	40	2,622	1	1092	9	2622	79	8738	12	77
Pasquotank	39,445	24	1,461	5	1,315	51	5635	25	3944	36	1826	27	117
Pender	57,680	100	19,227	100	19,227	94	19227	99	28840	89	12818	78	395
Perquimans	14,176	16	1,181	16	1,772	24	3544	5	2363	73	7088	89	545
Person	39,459	44	1,973	58	3,288	7	2466	22	3587	70	6577	35	158
Pitt	176,109	81	3,914	67	3,828	43	4760	52	5681	88	12579	24	113
Polk	20,761	74	3,460	75	4,152	21	3460	95	20761	67	5932	52	221
Randolph	142,400	82	3,956	62	3,560	69	7495	73	8376	81	9128	10	73
Richmond	46,253	48	2,011	30	2,313	6	2434	32	4625	38	1989	82	453
Robeson	132,732	12	1,062	52	3,017	41	4577	26	4148	83	9905	45	186
Rockingham	91,872	42	1,955	23	2,042	12	2871	14	3062	56	4106	9	70
Rowan	140,170	70	2,803	56	3,260	17	3115	39	5191	62	4672	23	109
Rutherford	67,177	45	1,976	27	2,239	35	4199	49	5598	68	6109	29	120
Sampson	64,644	1	440	63	3,591	33	4040	37	4973	90	16161	72	330
Scotland	35,720	2	533	13	1,624	18	3247	21	3572	65	5757	55	230
Stanly	61,339	5	713	10	1,573	4	1917	1	1460	31	1256	16	92
Stokes	46,144	58	2,307	96	11,536	54	5768	89	11536	28	941	62	254
Surry	73,521	25	1,532	42	2,723	44	4901	90	12253	37	1868	38	171
Swain	14,829	36	1,854	6	1,348	8	2471	23	3707	9	216	36	161
Transylvania	33,845	46	1,991	90	5,641	73	8461	62	6769	3	128	71	316
Tyrrell	4,180	52	2,090	7	1,393	99	0	4	2090	22	555	74	348
Union	220,792	86	4,166	86	5,257	84	10514	77	9200	66	5857	20	102
Vance	45,022	27	1,667	44	2,814	91	15007	76	9004	74	7504	49	210
Wake	1,003,596	62	2,490	37	2,509	55	5801	50	5638	43	2409	14	79
Warren	20,458	84	4,092	73	4,092	66	6819	20	3410	75	7577	39	172
Washington	12,792	55	2,132	92	6,396	100	0	91	12792	24	668	76	388
Watauga	52,816	3	574	25	2,201	11	2780	17	3301	18	443	75	354
Wayne	125,800	93	5,718	61	3,544	59	5990	74	8986	61	4522	73	337
Wilkes	69,709	21	1,367	48	2,905	22	3485	71	7745	26	758	42	175
Wilson	84,553	28	1,726	32	2,349	63	6504	12	3020	60	4448	33	150
Yadkin	37,953	72	3,163	54	3,163	88	12651	78	9488	52	3182	34	151
Yancey	17,937	47	1,993	51	2,989	25	3587	30	4484	5	161	65	280

Table for Item I.2 – Activities Ranked by Percentage of the Public Participating		
	Percentage Responding	Points Awarded
Visiting a beach or lake	69%	15
Walking for Pleasure or Exercise	61%	
Visiting parks or Historical Sites	60%	
Hiking, Trails	59%	
Fishing - Freshwater, bank or pier	58%	
Viewing scenery	52%	
Fishing - Freshwater, boat	50%	
Nature viewing	50%	
Swimming, All types	50%	
Gardening	49%	13.5
Hunting, Gun	47%	
Shooting, Target Firing Range	46%	
Boating - Power, Freshwater	46%	
Canoeing, Kayaking	45%	
Picnicking	45%	
Fishing - Saltwater, on-shore or pier	45%	
Camping, Developed site	44%	
Fishing - Saltwater, boat	37%	12
Outdoor Fairs Festivals	37%	
Driving for Pleasure	34%	
Camping, Primitive	34%	
Backpacking	33%	
Visiting Zoos	33%	
Nature Photography	33%	
Shooting , Skeet	31%	10.5
Bird Watching	31%	
Boating - Power, Saltwater	31%	
Open Space Park, Relaxing	30%	
Archery	28%	
Bicycling, On-road	28%	
Jogging, Running for exercise (on and off-road)	26%	
Hunting, Bow	26%	
Golf, 18-hole, 9-hole, driving range	22%	9
Bicycling, BMX or Off-Road	22%	
Playground Activities	22%	
Tubing	22%	
4WD, Other high-clearance vehicle	21%	
Baseball, Softball	20%	
Water Parks	18%	
Golf, Miniature	18%	
Spectator Activities	18%	

Table for Item I.2 – Activities Ranked by Percentage of the Public Participating		
	Percentage Responding	Points Awarded
Dog Parks	17%	7.5
Frisbee, Disc Golf, Kite Flying	16%	
Activity Not Listed		
Quad or All-Terrain Vehicle Driving	15%	
Collecting (flowers, insects, rocks)	14%	
Water skiing, Jet skiing	13%	
Basketball, Outdoor	13%	
SCUBA/Snorkeling	13%	
Skiing, Down Hill	12%	6
Tennis	11%	
Horseback Riding, Trails	11%	
Horseback Riding, General	11%	
Soccer	10%	
Utility Terrain Vehicle, Mod. Golf Cart	9%	
Splash Pool, Sprayground	9%	
Volleyball, Badminton	9%	
Football (playing)	8%	4.5
Rappelling, Rock Climbing	8%	
Geocaching	7%	
Surfing, All Types	7%	
Motorized Trail Biking, Dirt Biking	7%	
Orienteering	6%	
Sailing, Saltwater	6%	
Sailing, Freshwater	5%	
Radio, Remote Control Models	5%	3
CrossFit Training	5%	
Skiing, Cross Country, Snow Shoeing	5%	
Skateboarding	4%	
Spelunking (Caves)	4%	
Rollerskating	3%	
Rollerblading, Inline skating	3%	
Swimming (Competitive)	3%	
Ice Skating, outside	3%	1.5
Triathlon	3%	
Shuffleboard	2%	
Lacrosse	2%	
Windsurfing, Kitesurfing	1%	
Rugby	1%	
Cricket	0.3%	



Table for Item I.4 – Recreation Facilities Ranked as Urgently Needed by Local Recreation Managers		
Facility	Percentage	Points Awarded
Unpaved trails for walking and hiking	59%	15
Paved trails for walking, hiking, skating or biking	52%	
Picnic shelters	52%	
Multi-use fields	52%	
Non-swimming water activities (splashpad, sprayground)	50%	
Playgrounds	44%	10
Soccer fields	43%	
Wildlife/nature observation sites	42%	
Swimming pools	42%	
Nature/interpretive centers	41%	
Picnic areas	41%	
Softball fields	39%	
Mountain bike trails	38%	
Non-motorized boating access (canoe, kayak)	38%	
Baseball fields	33%	
Tennis courts	28%	5
Natural park area/open space	26%	
Water parks	24%	
Basketball courts	22%	
Shore/bank fishing	22%	
Dog parks	20%	
Nature/interpretive trails	18%	
Camping facilities	18%	
Fishing piers	18%	
Skate parks	15%	
Volleyball courts	15%	
Football fields	14%	
Horseback riding trails	13%	
Motorized boat launching ramps	11%	
Golf courses	3%	2
Facilities not listed		

# Project Evaluation Criteria for State Government



State of North Carolina

Department of Environment and Natural Resources

February 2015

## Scoring Summary

	Points Awarded by Type of Project		
Category	Acquiring Land	Developing Recreation Facilities	Both Land and Facilities
Planning	20	20	20
Public Involvement	7	7	7
Recreation Facilities	0	55	55
Site Considerations	5	5	5
Operation and Maintenance	15	15	15
Land Acquisition	15	0	15
Clientele Served	0	5	5
Consistency with the NC Outdoor Recreation Plan	35	35	35
Total Possible Points	97	142	157
Bonus: plus or minus 12 points for projects involving factors including partnerships, interconnected trail networks, access to public waters, as well as the quality of previous projects			

## LWCF Scoring System for State Government

Please provide all of the information requested for each item. Attach a separate page if more space is needed to address any item. Before beginning, please refer to the Definitions Section. A team of LWCF staff and regional consultants will evaluate each application based on the scoring system and make the final decision about the applicant's score.

<b>Applicant:</b>
<b>Project:</b>

### A. Planning: (20 possible points)

#### 3. Master Plan for the park and/or greenway system (10 points)

- a. ☐ The applicant has a master plan or other formal planning document created or revised within the past five years for the project site and the project conforms to the plan. (9 points)

Date the plan was approved/accepted: \_\_\_\_\_ (1 point)

or

- b. ☐ The applicant has a master plan or other formal planning document created or revised within the past six years to ten years for the project site and the project conforms to the plan. (4 points)

Date the plan was approved/accepted: \_\_\_\_\_ (1 point)

- c. ☐ The applicant has a conceptual plan for this project.

Date the plan was produced: \_\_\_\_\_ (1 point)

##### Documentation Required:

- A copy of the plan that shows this project.

#### 4. State parks systemwide parks and recreation plan (7 points)

- ☐ The applicant has a Comprehensive Systemwide Parks and Recreation Plan produced or revised in the past 10 years and the project conforms to the plan. (6 points)

Date the plan was approved/accepted: \_\_\_\_\_ (1 point)

##### Documentation Required:

- A copy or web reference for the comprehensive systemwide parks and recreation plan.
- List the page number(s) and tab or highlight where the project is referenced in the plan.

#### 4. 3-5 year capital improvement plan for parks and recreation (3 points)

- ☐ The applicant a capital improvements and/or land acquisition plan for parks and recreation and the project is identified in the plan.

Date the plan was approved/accepted: \_\_\_\_\_ (3 points)

##### Documentation Required:

- A copy of the capital improvement and/or land acquisition plan.
- List the page number(s) and tab or highlight where the project is referenced in the plan.

**B. Level of public involvement in developing and supporting the project: (7 possible points)**

**1. Public meetings (5 points):**

- ☐ The applicant conducted a public meeting(s) exclusively for discussing the project and obtaining comments. The public supported the project.

Date of the meeting(s): \_\_\_\_\_

**Documentation Required:**

- Provide a title page that gives the name of applicant, the name of the project and identifies the document as "Public Meetings."

**2. Support from a parks and recreation board (2 points):**

- ☐ The applicant presented the project to the parks and recreation advisory board or a similarly appointed group and received a motion of support for the project.

Date of the meeting(s): \_\_\_\_\_

**Documentation Required:**

- Include a title page that gives the name of the applicant, the project and identifies the document as "Presentation to Advisory Board."
- A copy of the minutes from the meeting that include support for the project.

**C. Public recreational facilities provided by the project: (55 possible points)  
(Does not apply for applications proposing land acquisition only.)**

**4. The state agency will be building the first public facilities at this site. (20 points)**

- ☐ Yes ☐ No

**Explain:**

**5. New, like or renovated facilities to be provided: (Maximum 30 points for the sum of 2a, 2b and 2c.)**

- a. The project will provide (check one):
- ☐ 3 or more types of new recreational facilities (20 points)
  - ☐ 2 types of new recreational facilities (15 points)
  - ☐ 1 type of new recreational facility (10 points)

**List the new types of recreational facilities:**

- b. The project will add recreational facilities at the park that are like the facilities that exist at the park. The project will add (check one):
- ☐ 3 or more types of recreational facilities (12 points)
  - ☐ 2 types of recreational facilities (8 points)
  - ☐ 1 type of recreational facility (4 points)

**List the types of recreational facilities:**

c. The project will provide major renovation of (check one):

- ☐ 3 or more types of recreational facilities (8 points)
- ☐ 2 types of recreational facilities (6 points)
- ☐ 1 type of recreational facility (4 points)

**List the recreational facilities to be renovated and why each renovation is needed:**

**6. The project will provide a trail or greenway (1/4 mile or longer) that links to existing recreation area(s), natural area(s), and/or communities. (5 points)**

☐ Yes      ☐ No

**Site plan must show trail linkage. Also, please identify by name and location the existing trail and areas to be linked by the proposed trail:**

**D. The suitability of the site for the proposed project. (5 possible points)**

- 6. ☐ The site is suited for the proposed development with minimal adverse impact to the environment. (1 point)
- 7. ☐ The location of the site enhances the park and the public's access to the park. Describe how the location of the site will enhance the park and the public's access to the park. (1 point)
- 8. ☐ The site is enhanced by the adjacent property uses. Describe the uses of the adjacent property and how they will enhance the park. (1 point)
- 9. ☐ The proposed site is large enough to adequately accommodate the proposed development. The proposed project will require minimal site preparation considering the geographic region where it is located. (1 point)
- 10. ☐ The site is free of restrictive easements, overhead power lines, or other intrusions that would limit the proposed development or cause a safety hazard for users. (1 point)

**To be awarded these points, the applicant must adequately describe why the proposed project meets each of the five criteria. For land acquisition only projects, base comments on the proposed plan for developing the site after completing the LWCF project.**

**E. The applicant's commitment to operating and maintaining the project. (15 possible points)**

1. ☐ The applicant has sufficient staff and/or resources to manage the site long term. (15 points)
2. ☐ The applicant has a moderate amount of staff and/or resources to manage the site long term. (8 points)
3. ☐ The applicant has minimal staff and/or resources to manage the site long term. (4 points)
4. ☐ An organized volunteer group, such as a civic group or non-profit land trust will operate and maintain the site. (2 points)

**Provide the name of the organization that will operate and maintain the site:**

**Describe how and when the site will be open to the general public.**

**F. Land acquisition (15 possible points)**

1. ☐ If not purchased at this time, a significant natural, cultural, recreational, scenic or highly-threatened resource will be used for other purposes. (15 points)
2. ☐ The site is an excellent natural and/or recreational resource. (10 points)
3. ☐ The site is an average natural and/or recreational resource. (5 points)

**Describe in detail why the site's resources should receive 5, 10, or 15 points:**

Not applicable for projects proposing facility development only.

**G. Clientele served and accessibility (5 possible points)**

3. ☐ Proposed project is designed primarily for use by persons with disabilities. (3 points)
4. ☐ Proposed project will renovate existing facility(s) to make them accessible to persons with disabilities. (2 points)

Not applicable for projects proposing land acquisition only.

**H. Consistency with SCORP priorities – Contribution to SCORP goals and objectives, public preferences for recreation activities, and recreation facility needs identified by recreation managers. (35 possible points)**

5. ☐ Contribution to SCORP goals, objectives and initiatives (5 points)

Number of Objectives Addressed	Points Awarded
Five or Six	5
Four	4
Three	3
Two	2
One	1

Objective # 1: Meet the needs of North Carolina’s rapidly growing population by maintaining and enhancing its outdoor recreation resources;

Objective # 2: Support improvements in public health and fitness by increasing opportunities for physical activity;

Objective # 3: Improve the visibility of and public access to public recreation areas and foster cooperation between public recreation managers;

Objective # 4: Promote the economic advantages of the state’s recreation opportunities for communities across North Carolina;

Objective # 5: Promote and conserve North Carolina’s vast and high quality natural resources and landscapes;

Objective # 6: Increase public awareness of the state’s natural resources and outdoor recreation opportunities, to include the significance of conservation, through interpretation, education and outreach.

6. ☐ Public preferences - Comparing LWCF Applications based on the public preferences for recreation. See the list of recreational activities ranked by public participation on page E - 33. (15 points)

Activity rank (from high to low) based on percentage of the public participating	Points Awarded
Highest ranked group	15
2 <sup>nd</sup> ranked group	13.5
3 <sup>rd</sup> ranked group	12
4 <sup>th</sup> ranked group	10.5
5 <sup>th</sup> group (or activity not listed)	9
6 <sup>th</sup> group	7.5
7 <sup>th</sup> group	6
8 <sup>th</sup> group	4.5
9 <sup>th</sup> group	3
10 <sup>th</sup> group	1.5

Applications proposing several types of activities with different points awarded will be averaged.  
For projects proposing only land acquisition, use only if land base for the recreational use is suitable.



7. ☐ Recreation facility needs identified by recreation managers in North Carolina. Refer to the list of recreation facilities ranked as most urgently needed on page E - 34. (15 points)

<b>Recreation facilities and areas ranked (from high to low) based on priorities identified by recreation managers</b>	<b>Points Awarded</b>
Highest ranked group	15
2 <sup>nd</sup> ranked group	10
3 <sup>rd</sup> ranked group	5
4 <sup>th</sup> group (or activity not listed)	2

Applications proposing several types of activities with different points awarded will be averaged.

For projects proposing only land acquisition, use only if land base for the recreational use is suitable.

**I. Other positive or negative factors: (+ 12 or – 12 possible points)**

3. Positive Features ( + 12 points possible)

- a. ☐ Application is a joint project between two or more units of government or the project is identified in a multi-jurisdictional parks and recreation plan adopted by the applicant(s). (+3 points)
- b. ☐ Application is for an interconnected trail that links to an existing recreation area(s), school(s), businesses and/or communities located outside of the project site. (+2 points)
- c. ☐ Project proposes new recreational facility to provide public access to public waters (such as river, ocean, sound, or lake). (+2 points)
- d. ☐ Applicant has: developed quality outdoor recreation facilities and they are well maintained for public use.

or

Applicant has satisfactorily completed and complied with grant compliance guidelines on previous LWCF and/or PARTF projects. (+ 5 points)

4. Negative Feature(s) ( - 12 points possible)

- a. ☐ State park unit in the application has an active LWCF grant (- 2 points)
- b. ☐ Poor application documentation (poor maps/site plan, instructions not followed, missing documentation, unrealistic budget, inconsistencies, etc.) (-3 points)
- c. ☐ Over half of the project's cost is for site preparation and/or support facilities (such as restrooms, roads, utilities, dredging, landscaping, etc.) (-2 points)
- d. ☐ Applicant has history of poor quality and/or substandard maintenance and operation of their outdoor recreation facilities.

or

Below average compliance with grant guidelines and/or currently has an outstanding compliance problem with an existing or previous project. (-5 points)

Table for Item H.2 – Activities Ranked by Percentage of the Public Participating		
	Percentage Responding	Points Awarded
Visiting a beach or lake	69%	15
Walking for Pleasure or Exercise	61%	
Visiting parks or Historical Sites	60%	
Hiking, Trails	59%	
Fishing - Freshwater, bank or pier	58%	
Viewing scenery	52%	
Fishing - Freshwater, boat	50%	
Nature viewing	50%	
Swimming, All types	50%	
Gardening	49%	13.5
Hunting, Gun	47%	
Shooting, Target Firing Range	46%	
Boating - Power, Freshwater	46%	
Canoeing, Kayaking	45%	
Picnicking	45%	
Fishing - Saltwater, on-shore or pier	45%	
Camping, Developed site	44%	
Fishing - Saltwater, boat	37%	12
Outdoor Fairs Festivals	37%	
Driving for Pleasure	34%	
Camping, Primitive	34%	
Backpacking	33%	
Visiting Zoos	33%	
Nature Photography	33%	
Shooting , Skeet	31%	10.5
Bird Watching	31%	
Boating - Power, Saltwater	31%	
Open Space Park, Relaxing	30%	
Archery	28%	
Bicycling, On-road	28%	
Jogging, Running for exercise (on and off-road)	26%	
Hunting, Bow	26%	
Golf, 18-hole, 9-hole, driving range	22%	9
Bicycling, BMX or Off-Road	22%	
Playground Activities	22%	
Tubing	22%	
4WD, Other high-clearance vehicle	21%	
Baseball, Softball	20%	
Water Parks	18%	
Golf, Miniature	18%	
Spectator Activities	18%	

Table for Item H.2 – Activities Ranked by Percentage of the Public Participating		
	Percentage Responding	Points Awarded
Dog Parks	17%	7.5
Frisbee, Disc Golf, Kite Flying	16%	
Activity Not Listed		
Quad or All-Terrain Vehicle Driving	15%	
Collecting (flowers, insects, rocks)	14%	
Water skiing, Jet skiing	13%	
Basketball, Outdoor	13%	
SCUBA/Snorkeling	13%	
Skiing, Down Hill	12%	
Tennis	11%	6
Horseback Riding, Trails	11%	
Horseback Riding, General	11%	
Soccer	10%	
Utility Terrain Vehicle, Mod. Golf Cart	9%	
Splash Pool, Sprayground	9%	
Volleyball, Badminton	9%	
Football (playing)	8%	
Rappelling, Rock Climbing	8%	4.5
Geocaching	7%	
Surfing, All Types	7%	
Motorized Trail Biking, Dirt Biking	7%	
Orienteering	6%	
Sailing, Saltwater	6%	
Sailing, Freshwater	5%	
Radio, Remote Control Models	5%	3
CrossFit Training	5%	
Skiing, Cross Country, Snow Shoeing	5%	
Skateboarding	4%	
Spelunking (Caves)	4%	
Rollerskating	3%	
Rollerblading, Inline skating	3%	
Swimming (Competitive)	3%	
Ice Skating, outside	3%	1.5
Triathlon	3%	
Shuffleboard	2%	
Lacrosse	2%	
Windsurfing, Kitesurfing	1%	
Rugby	1%	
Cricket	0.3%	

Table for Item H.3 – Recreation Facilities Ranked as Urgently Needed by Recreation Managers		
Facility	Percentage	Points Awarded
Unpaved trails for walking and hiking	59%	15
Paved trails for walking, hiking, skating or biking	52%	
Picnic shelters	52%	
Multi-use fields	52%	
Non-swimming water activities (splashpad, sprayground)	50%	
Playgrounds	44%	10
Soccer fields	43%	
Wildlife/nature observation sites	42%	
Swimming pools	42%	
Nature/interpretive centers	41%	
Picnic areas	41%	
Softball fields	39%	
Mountain bike trails	38%	
Non-motorized boating access (canoe, kayak)	38%	
Baseball fields	33%	
Tennis courts	28%	5
Natural park area/open space	26%	
Water parks	24%	
Basketball courts	22%	
Shore/bank fishing	22%	
Dog parks	20%	
Nature/interpretive trails	18%	
Camping facilities	18%	
Fishing piers	18%	
Skate parks	15%	
Volleyball courts	15%	
Football fields	14%	
Horseback riding trails	13%	
Motorized boat launching ramps	11%	
Golf courses	3%	2
Facilities not listed		